(5) Unincorporated Ventura County Consolidated Projects

Table 4.4-18 contains the unincorporated Ventura County consolidated project list. Projects more than five miles away from the Newhall Ranch Specific Plan area and/or smaller-scale projects (less than 700 acres) are listed in a consolidated manner, and are grouped by local jurisdiction.

Table 4.4-18
Ventura County Consolidated Projects

Name	Location	Units	Commercial/ Industrial (sf)	Status
Residential/Mixed Use Projects				
Permit No. LU08-0062	Located within the Piru area of Ventura County; approximately 7 miles west of the proposed RMDP/SCP project.	66	0	Pending
Residential Subtotal		**66**	**0**	
Commercial/Industrial Projects				
Permit No. LU08-0047	Located in the Piru area of Ventura County; approximately 7 miles west of the proposed RMDP/SCP project.	0	19,300	Pending
Commercial/Industrial Subtotal		**0**	**19,300**	
Recreational Projects				
Permit No. LU07-0088	Located in the Piru area of Ventura County; approximately 8 miles northwest of the proposed RMDP/SCP project.	0	**(1)**	Approved
Total		**66**	**19,300**	

(1) This project consists of minor improvements to existing buildings, structures and utilities at Lake Piru
Source: Ventura County

(6) Consolidated Projects Overview

Table 4.4-19 contains a summary of the consolidated project information contained in **Tables 4.4-14** to **4.4-17**, above.

Table 4.4-19
Summary of Total City/County/Caltrans Consolidated Projects

Agency	Units	Comm./Ind (sf)[1]	Total Acres/Open Space Acres[2]
Santa Clarita	13,003	18,134,857	7,609/1,883
Los Angeles County	35,459	21,134,815	23,161/3,627
Fillmore	1,100	3,935,400	492/54
Santa Paula	1,350	810,800	7,119
Ventura County	66	19,300	unknown
Total	**50,978**	**44,035,172**	**59,929/5,564**

Notes:

[1] *Includes some instances where commercial/industrial acreages were converted to square footage [shown in brackets in **Tables 4.4-14 to 4.4-16**] to provide an estimated basis for aggregating square footage totals.*

[2] *Open space acreage information was not available for all projects; therefore, the "Open Space Acres" number represents the minimum open space that is planned for the projects in **Tables 4.4-14 to 4.4-16**.*

*Source: **Tables 4.4-14** to **4.4-18.***

(7) Corps (Section 404 Permit) Projects

Between 1988 and 2006, the Corps issued an average of approximately 12 section 404 permits per year within the Santa Clara River watershed. (See **Figures 4.4-12** and **4.4-13**, below.) In general, the acreages of waters of the United States affected by projects authorized under section 404 permits in a given year were related to the number of projects authorized that year. The data for 1998 and 2005 (years in which major El Niño events occurred), showed peaks in the number of authorizations granted, and a corresponding trend with respect to acreages of jurisdictional areas impacted. This is likely due to the fact that dramatic flood events necessitate the need for repairs and maintenance of existing facilities, and may also underscore the general need to construct additional flood and erosion facilities for protection against future disasters.

Of the 228 projects permitted by the Corps under section 404 permits in the Santa Clara River watershed between 1988 and 2006, more were associated with emergency repairs and maintenance than any other type of activity. Combined, the permits issued for emergency repairs and maintenance of existing facilities accounted for a combined 25 percent of the total permits issued (16 percent were emergency

repairs, 9 percent maintenance). Flood protection activities, including bank protection, riprap, rock groin, and culver/levee improvements, accounted for 25 percent of the total permits issued. Another 17 percent of the permits issued were associated with residential development. Unknown activities (largely from older permits with minimal available data) comprised 15 percent of the permits. The remaining 18 percent include bridges, channel alterations, sediment removal, storm drains, and other projects. (See **Figure 4.4-14**.)

(8) Federal Biological Opinions

Table 4.4-20 summarizes federal biological opinions issued in the Santa Clara River watershed between 1993 and 2006 as they relate to the species that are the most likely to be reviewed by the USFWS and CDFG as part of the species-related determinations and/or authorizations that are being sought as part of the Newhall Ranch Specific Plan process. A total of 25 USFWS biological opinions were reviewed. One of those opinions is not incorporated below because it did not affect any species of primary concern. Three opinions have been combined into one entry below because they concern the same request.

(9) CDFG Streambed Projects

Between 1983 and 2006, CDFG issued an average of 21 streambed alteration agreements per year in the Santa Clara River watershed. (See **Figures 4.4-15** and **4.4-16**.) In general, the acreages of jurisdictional streambeds affected by projects authorized under the Fish and Game Code section 1600 program, in a given year, were related to the number of projects authorized that year. The years following the 1998 and 2005 El Niño events showed peaks in the number of authorizations granted, and a corresponding trend with respect to acreages of jurisdictional areas impacted. This is likely due to the fact that dramatic flood events necessitate the need for repairs and maintenance of existing facilities, and may also underscore the need to construct additional flood and erosion facilities for protection against future disasters.

Of the 503 projects permitted under the section 1600 program in the Santa Clara River watershed between 1983 and 2006, 32 percent of the project activities were associated with bridges and maintenance activities. The combined number of streambed alteration agreements issued for the installation of riprap, bank protection, and miscellaneous flood/erosion control facilities accounted for 19 percent of the total authorizations issued. Sediment removal and fill activities accounted for 12 percent of the authorized activities, while channel alterations account for 11 percent of the total authorized activities. Unknown activities (largely from older permits with minimal available data) comprised 3 percent of the permits. (See **Figure 4.4-17**.) The remaining 23 percent include culverts, storm drains, vegetation removal, and other projects.

(10) CDFG Take Authorizations

Prior to 1997, CDFG issued Memoranda of Understanding and a few permits for authorization of incidental take of species listed under the California ESA. Between 1988 and 1997, CDFG considered 273 incidental take authorizations statewide, of which 174 were ultimately signed. Of those 174 authorizations, three were for western yellow-billed cuckoo, 11 for least Bell's vireo, and one for unarmored threespine stickleback. In the bioregion that includes the proposed project (the South Coast bioregion), approximately 20 take authorizations were issued during that time period, which authorized a total of roughly 1,000 acres of habitat impacts (including coastal sage scrub, alluvial fan sage scrub, non-native grassland, riparian, and wetland habitat types) and required 2,000 acres of mitigation.[19]

More recently, CDFG has issued 48 take authorizations in the general regional vicinity of the project (*i.e.*, generally within Los Angeles, Ventura, and Santa Barbara Counties, but also including some authorizations in San Diego County). Most of those authorizations were for projects that are a significant distance from the Newhall Ranch Specific Plan area, which includes Landmark Village (*e.g.*, greater than 25-30 miles), and/or for species that are not of primary concern for the proposed project. The four most relevant authorizations are summarized in **Table 4.4-21**, below. Relevancy was determined by proximity to the proposed project and shared species impacts.

In addition, several NCCPs recently have been proposed and/or approved in Southern California. These NCCPs (or combination HCP/NCCPs) would provide comprehensive take authorizations for larger planning areas in parts of Kern, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties. However, none of these proposed or approved planning/take authorization documents were deemed to be relevant for analysis in this EIR because of their distance from the proposed project (*e.g.*, greater than 25-30 miles) and/or their lack of similarity of species of primary concern.

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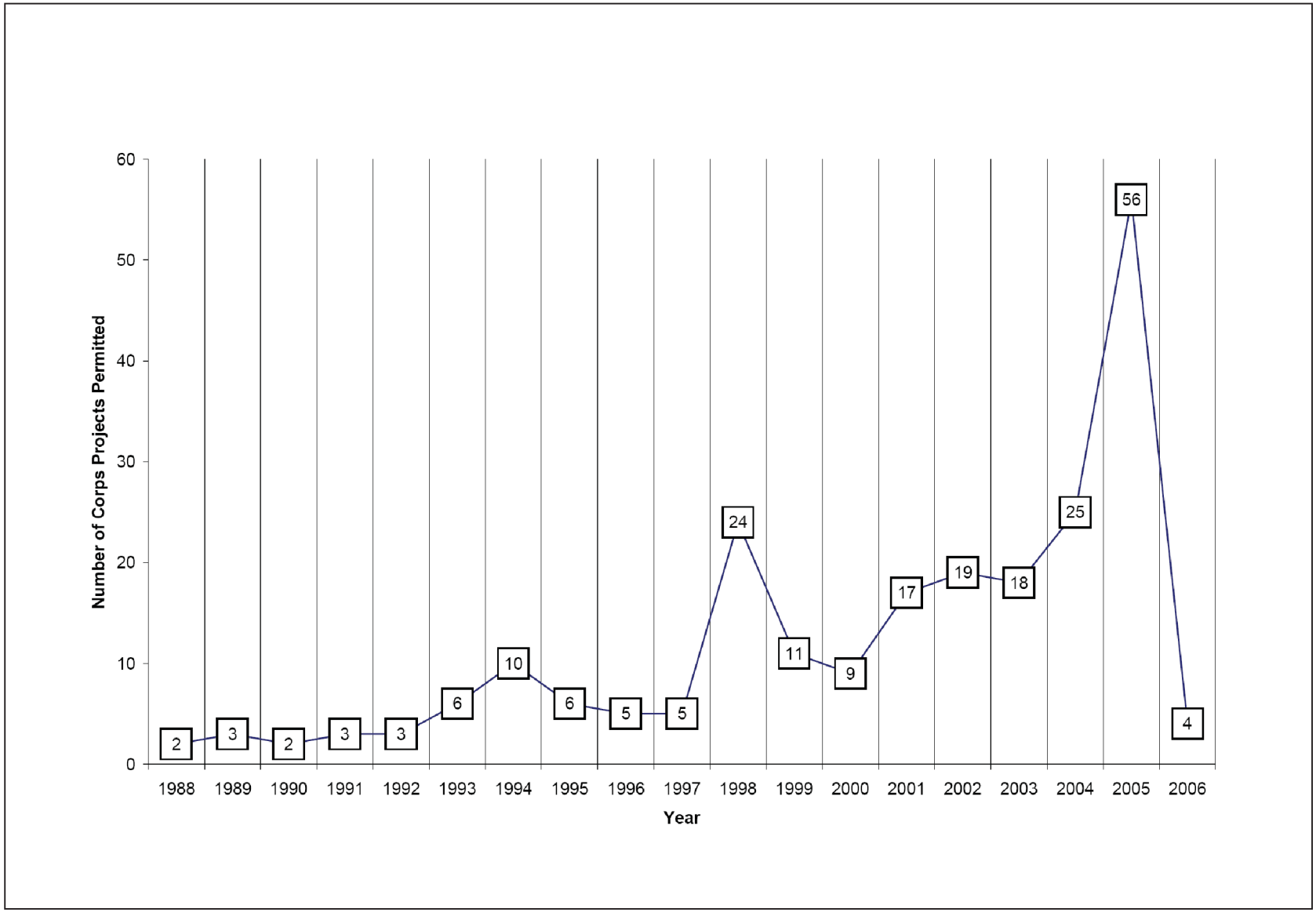
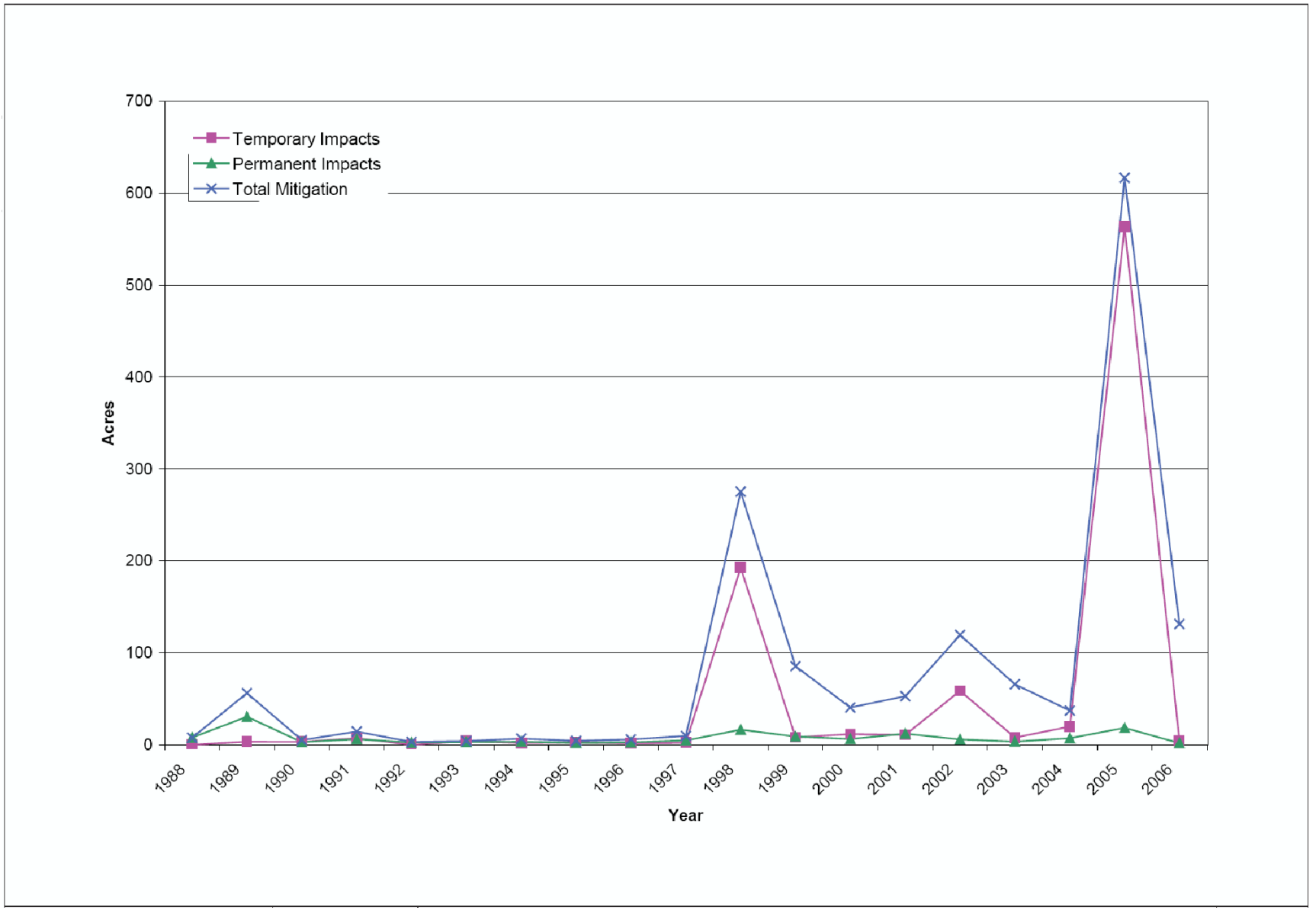
19 The California Department of Fish and Game and U.S. Army Corps of Engineers, "Final Environmental Impact Report/Environmental Impact Statement: 404 Permit and 1603 Streambed Alteration Agreement for Portions of the Santa Clara River and its Tributaries, Los Angeles County (SCH No. 1997061090)" (August 1998) is incorporated by reference, as permitted in section 15150 of the *State CEQA Guidelines*. All referenced documents are available for public inspection and review upon request to: County of Los Angeles, Department of Regional Planning, 320 West Temple Street Los Angeles, California 90012 (Samuel Dea; (213) 974-6461) or Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012 (Susan Tebo; (805) 437-1900).



SOURCE: CORPS 2008

FIGURE 4.4-12

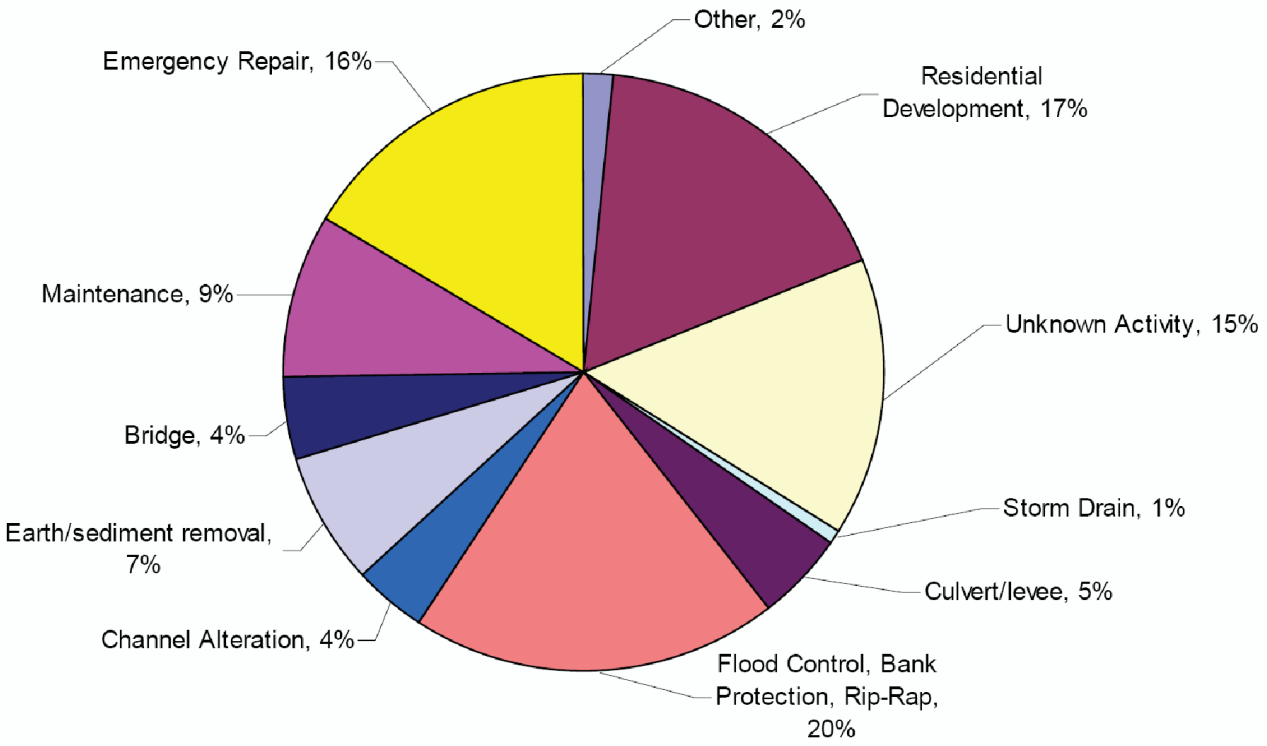
Consolidated Corps Projects (1988 and 2006)



SOURCE: CORPS 200 8

FIGURE 4.4-13

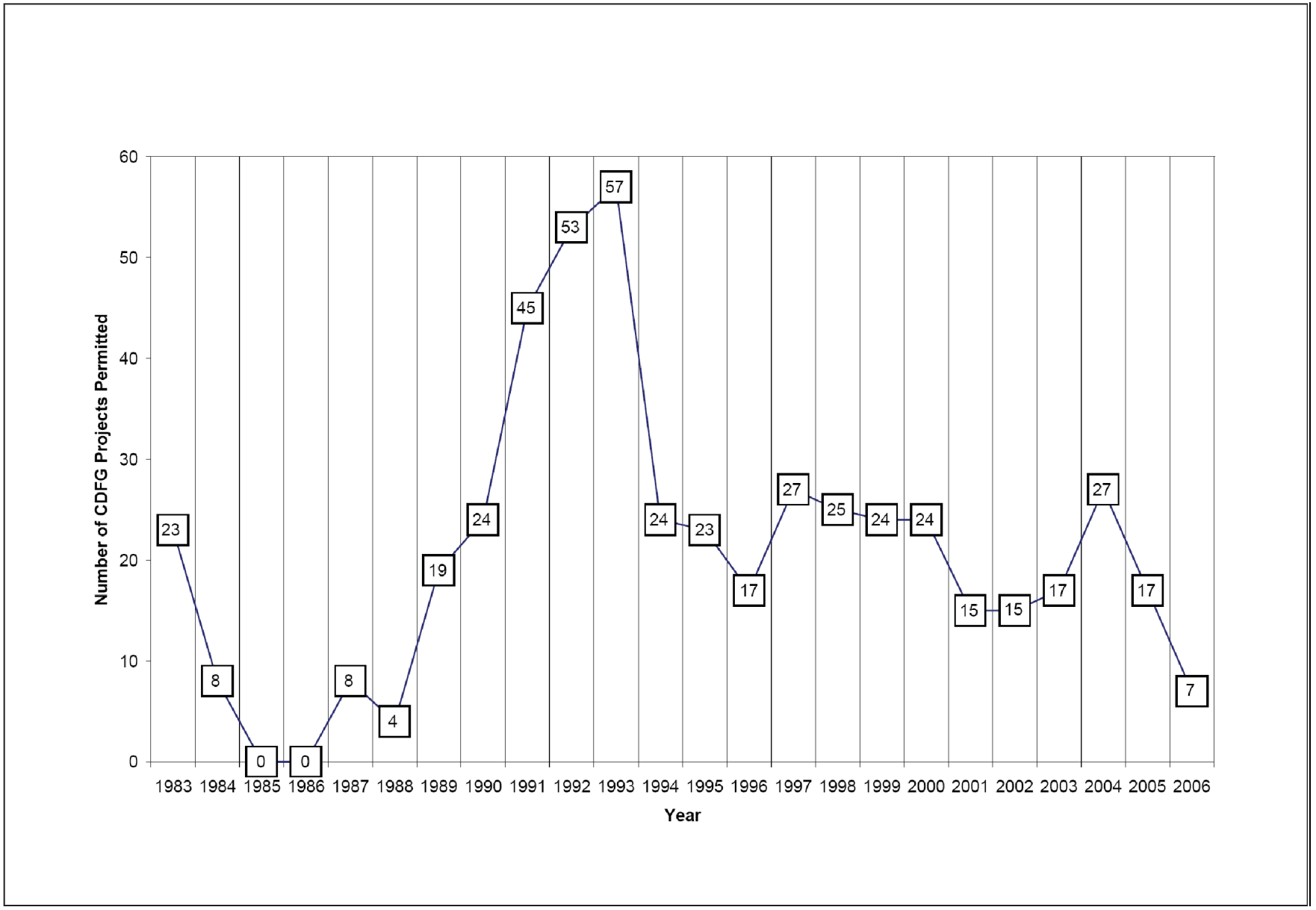
Consolidated Corps Permits, Acreage of Impacts and Mitigation (1988 to 2006)



SOURCE: CORPS 2006, URS 2009

FIGURE 4.4-14

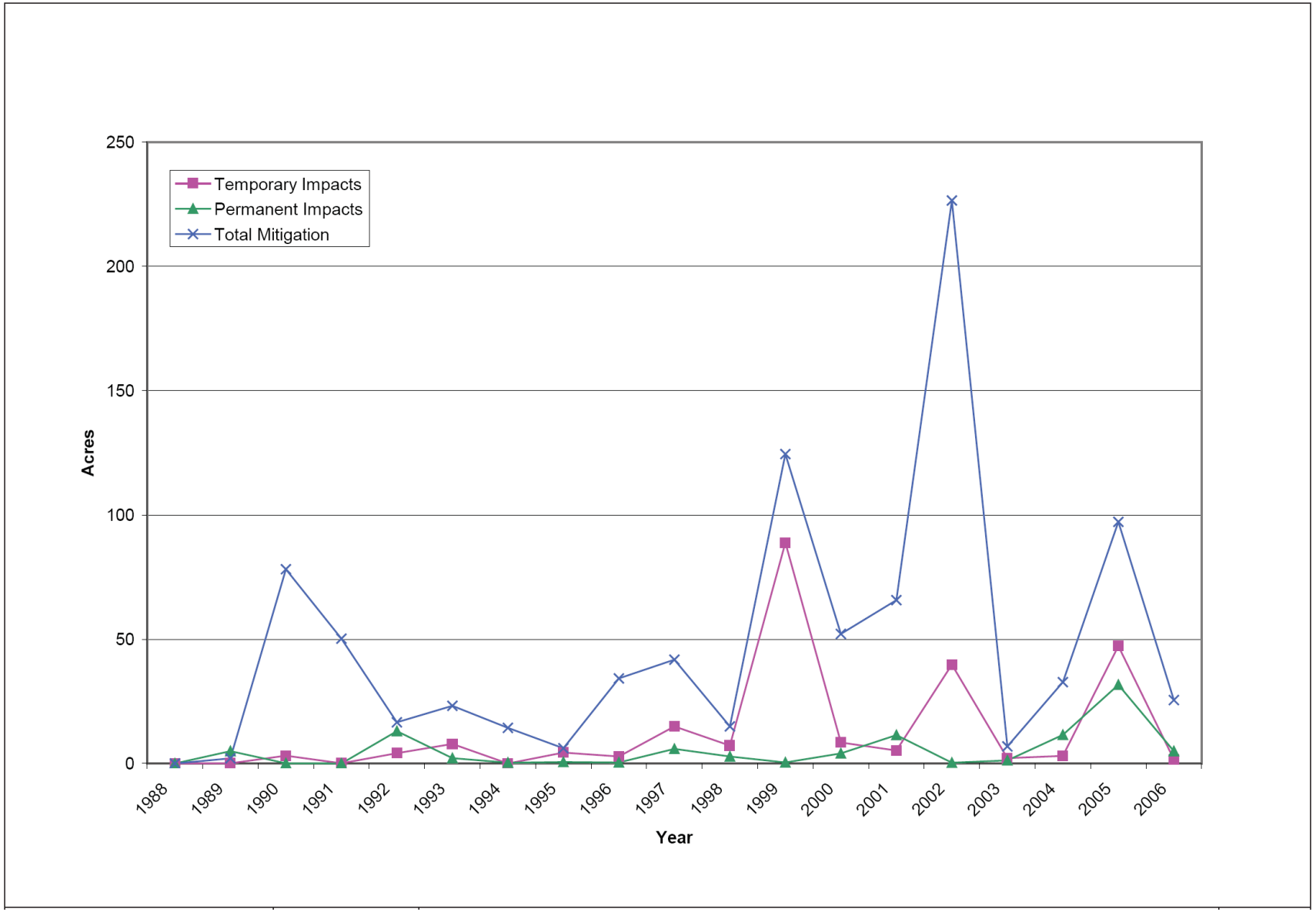
Corps Permitted Activities by Types (1998-2006)



SOURCE: DUDEK – 2008

FIGURE 4.4-15

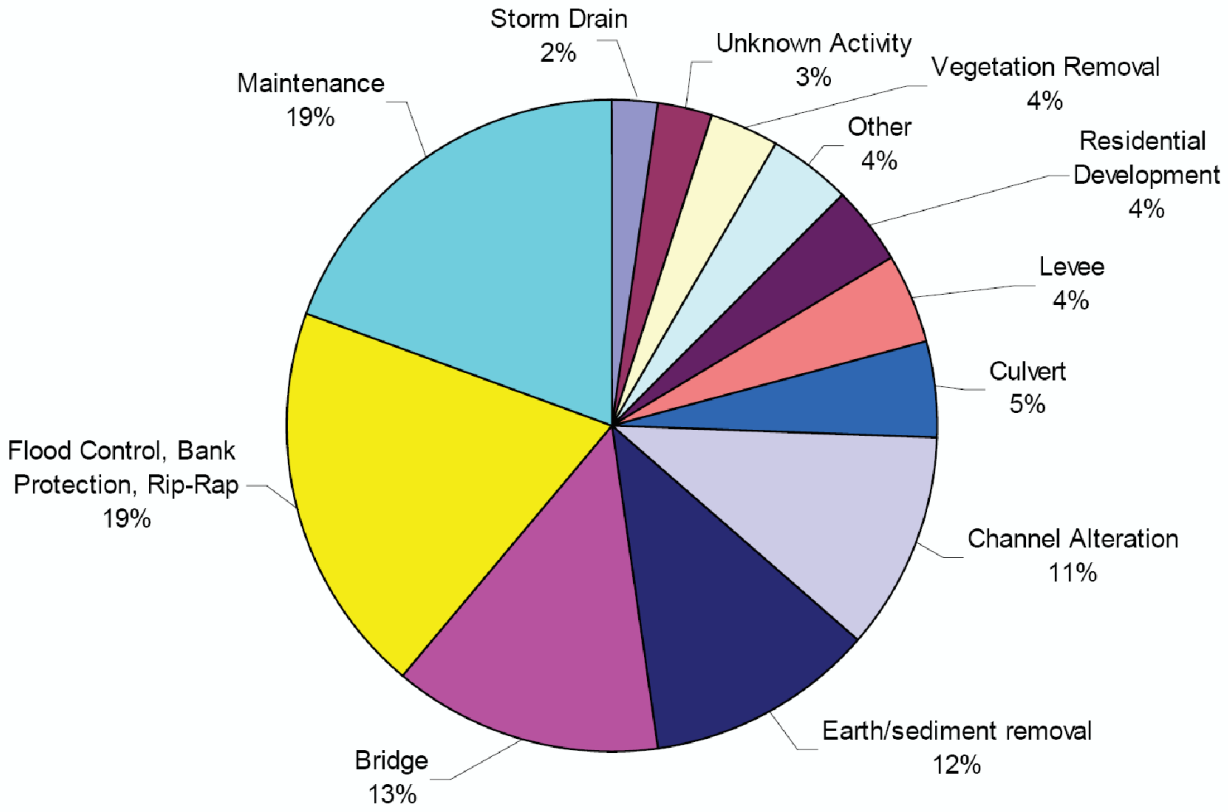
Consolidated CDFG Streambed Projects (1983-2006)



SOURCE: DUDEK – 2008

FIGURE 4.4-16

Consolidated CDFG Streambed Permits, Acreages of Impacts and Mitigation (1983-2006)



SOURCE: DUDEK – 2008

FIGURE 4.4-17

Consolidated CDFG Streambed Permits by Type (1983-2006)

Table 4.4-20
Federal Biological Opinion Summary, Santa Clara Watershed (1993-2006)

Project	Species Covered	Acres Permanently (P) or Temporarily (T) Disturbed	Location	Description	Conclusion
Temporary Diversion Berm on the Santa Clara River on the Newhall Ranch Op. 1065.1163.1544 October 26, 1993	UTS	0 P 0.09 T (est.)	Along the Santa Clara River on the Newhall Ranch.	Construction of a 2' x 10' x 400' berm to divert water away from an exempt levee which is to be rebuilt.	Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat.
Southern Pacific Milling Company Sand and Gravel Mine Op.1025.1129.1492 February 7, 1994	LBV	19 P T-unknown	Within and adjacent to the Santa Clara River from the western edge of the city of Santa Paula downstream to the confluence with the Lindsay Barranca in Ventura County.	The applicant proposes to install a sand and gravel mine.	Project is not likely to jeopardize the continued existence of the LBV; no adverse modification of critical habitat.
Installation of a Southern California Gas Company Pipeline Op. 1380.1517.2051 August 28, 1995	UTS	0 P .23 (est.) T	Santa Clara River at Castaic Creek.	Installation of an 8-mile gas line that crosses the Santa Clara River and Castaic Creek.	Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat.
Installation of Irrigation Pipelines on the Santa Clara River in Newhall Ranch Op. 1392.1533.2075 October 23, 1995	UTS	0.005 P 1.45 T	Santa Clara River at Summer Crossing.	Installation of 18" x 12" PVC irrigating pipe and removal of fill that comprises Summer Crossing; purpose is to irrigate nearby Citrus Orchards.	Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat.

Project	Species Covered	Acres Permanently (P) or Temporarily (T) Disturbed	Location	Description	Conclusion
Construction of Erosion Control Facilities for the Valencia Water Reclamation Plant Op. 1406.1547.2098 February 29, 1996	UTS & LBV	1.4 P T-unknown	Santa Clara River near the Valencia Water Reclamation Plant.	Construction of a 50' x 12' x 630' keystone retaining wall.	Project is not likely to jeopardize the continued existence of either species; no adverse modification of critical habitat.
Repair of I-5 Bridge Over Santa Clara River Op. 1443.1591.2158 September 6, 1996	UTS ~LBV & ~SWF	1.4 P T-unknown	The Intersection of I-5 and the Santa Clara River.	The repair of two pier footings of the I-5 bridge crossing the Santa Clara River.	Project is not likely to jeopardize the continued existence of the UTS; no adverse modification of critical habitat.
Widening of SR-126 Op. 1472.1623.2199 April 20, 1997	LBV	0.5 P T-unknown	SR-126 just east of Rancho Camulos, from city of Piru to Los Angeles County line.	Grubbing, vegetation removal, and installation of retaining walls for ROW expansion.	Project is not likely to jeopardize the continued existence of the LBV; no adverse modification of critical habitat.
Sewer Line and Force Main Op. 2390.3666.4402 September 28, 1998	UTS ~LBV	0.7 P T-unknown	Near the intersection of the Santa Clara River and Old Road Bridge in the city of Santa Clarita.	Replacement of two underground sewer lines that cross the Santa Clara River.	Not likely to jeopardize the continued existence of the species or adversely affect critical habitat.
Newhall Land and Farming's Summer Crossings and Water Diversions Op. 911.1015.1329, 911.1015.1330, & 911.1351.1804 September 25, 1998 Note: Duplicate Letters	UTS	0 P 14 T	Santa Clara River from the Castaic Creek confluence to the Rancho Camulos vicinity.	Installation of six temporary vehicle crossings and four water diversions along the Santa Clara River from native materials.	The action as is not likely to jeopardize the continued existence of the UTS or modify critical habitat.

Project	Species Covered	Acres Permanently (P) or Temporarily (T) Disturbed	Location	Description	Conclusion
Natural River Management Plan Op. 116.122.166 Nov. 27, 1998	UTS, LBV & SWF	96 P 71 T	Along the Santa Clara River and its tributaries in Valencia and Santa Clarita and adjacent unincorporated areas of Los Angeles County at the inlet of the San Francisquito Creek and confluence with the South Fork of the Santa Clara River.	81,150 lf of bank protection along the River and San Francisquito Creek; a 1,700 foot long inlet structure at the confluence with the South Fork; approximately 85 storm drain outlets; eight new bridges; a replacement for an existing bridge; and upgrades to six existing bridges.	Activities are not likely to jeopardize the continued existence of these species or result in destruction or adverse modification of critical habitat.
Replacement of the I-5 Bridge over the Santa Clara River, Los Angeles County Op. 148.155.1274 December 26, 2000	UTS & LBV	1.18 P 0.42	Where I-5 crosses the Santa Clara River.	Caltrans (with FHWA funding), proposes to replace the existing bridges where I-5 crosses the Santa Clara River, with a single structure, consisting of 10 traffic lanes. Construction activities would include major and minor grading, installing pier supports, and the demolition and removal of the existing bridges.	Not likely to jeopardize the existence of these three species and is not likely to destroy or adversely modify the critical habitat of the LBV or the proposed critical habitat of the UTS.
Replacement of the Highway 101 Bridge over the Santa Clara River, Ventura County, California Op. 852.921.1190 May 3, 2001	LBV & SWF	1.18 P 0.42 T	Highway 101 and the Santa Clara River; activities are expected to occur only on and under the bridge, and within 100 feet up- and downstream of the bridge.	Caltrans, (with FHWA funding) proposes to replace existing Highway 101 bridges over the Santa Clara River with a single concrete bridge with 12 lanes, a bike path, 12 piers and two abutments.	The action as is not likely to jeopardize the continued existence of these species; no critical habitat present.
Amendment to the Biological Opinion for the Santa Clara River Bridge Replacement Project Op. 852.921.1195 April 3, 2002	LBV & SWF	1.18 P 0.42 T	Interstate 101 and the Santa Clara River (although the opinion inadvertently references I-5).	Caltrans was unable to comply with term and condition 7 of the May 3, 2001, opinion requiring removal of riparian vegetation within 100 yards of the bridge before March 15 of each construction year.	Qualified ornithologists conducted surveys for breeding birds in the project area and concluded that no LBV or SWF had been detected. Therefore, the biological opinion can be amended without resulting in additional take of the species.

Project	Species Covered	Acres Permanently (P) or Temporarily (T) Disturbed	Location	Description	Conclusion
Hardluck Campground Low Water Crossing Replacement Op. 2409.3697.4463 September 10, 2002	AT	0.25 P T - unknown	Piru Creek near Hardluck Campground in Los Padres National Forest.	Replacement of a concrete low water crossing.	Not likely to jeopardize the continued existence of the AT or adversely affect critical habitat.
Natural River Management Plan (NRMP) (Supplement to previous application dated November 27, 1998) Op. 116.154.212 Nov. 15, 2002	AT	66 P 71 T (smaller acreage for permanent reflects that a portion of the project had already been completed)	Same as previous.	Same as previous.	The NRMP, as proposed, is not likely to jeopardize the continued existence of the AT.
Castaic Creek Bank Protection, Valencia Commerce Center, Los Angeles County, California Op. 189.203.342 December 17, 2002	UTS & AT ~LBV	135 P 8.3 T	Castaic and Hasley creeks adjacent to the Santa Clara River.	Installation of approximately 19,400 feet of bank protection along Castaic and Hasley creeks over a period of four years.	The project, as proposed, is not likely to jeopardize the continued existence of either of these species.
Re-initiation of the replacement of the I-5 Bridge over the Santa Clara River, Los Angeles County Op. 148.156.215 August 1, 2003	UTS, LBV, SWF, & AT	1.28 P 0.42 T	Where I-5 crosses the Santa Clara River.	Same as above, but permanently impacted area will be expanded by 0.1 acre.	Action is not likely to jeopardize the continued existence of the species.

Project	Species Covered	Acres Permanently (P) or Temporarily (T) Disturbed	Location	Description	Conclusion
Santa Clara River Reaches 71 & 82 Op. 884.976.1397 October 24, 2004	UTS & AT	5.81 P T-unknown	Reaches 71 & 82 of the Santa Clara River.	Clearing of soft-bottom channels using both heavy mechanical equipment and hand clearing.	The action is not likely to jeopardize the continued existence of these species.
Townhomes at the River Development and Construction of a Flood Control Levee Op. 1726.2067.3266 March 31, 2005	LBV	11.4 P T-unknown	City of Fillmore.	66 residential units on an 11.4 acre site and 26' x 730' x 10' x 90' levee installation.	Not likely to jeopardize the continued existence of the LBV; critical habitat will not be adversely affected.
I-5 Hasley Canyon Interchange Improvement Op. 2141.3126.3703 May 31, 2005	UTS & AT	0.01 P 0.42 T (est)	I-5 at Castaic Creek and Hasley Canyon.	Replacement of existing over-crossings, ramps, and supports.	Not likely to jeopardize the continued existence of either species; critical habitat will be adversely affected.
Amendment to Biological Opinion for Santa Clara Bridge Replacement Op. 852.921.4942 February 16, 2006	LBV & SWF	1.18 P 0.42 T	Interstate 101 and the Santa Clara River.	Proposed revision of project description to include underground drainage and outlet.	The revised project is not likely to adversely affect these species.

Project	Species Covered	Acres Permanently (P) or Temporarily (T) Disturbed	Location	Description	Conclusion
Santa Paula Water Recycling Facility Op. 2260.3483.5550 September 5, 2006	LBV	0 P 9.4 T	Approximately 58 acres immediately south of SR-126 and west of Peck Road in Santa Paula.	Construction of a new water recycling facility including new percolation ponds that would discharge into the Santa Clara River.	Not likely to jeopardize the continued existence of the LBV; critical habitat will not be adversely affected.

Notes:
UTS - Unarmored Threespine Stickleback
SWF - Southwestern Willow Flycatcher
LBV - Least Bell's Vireo
AT - Arroyo toad
~ - species mentioned but not discussed
Source: USFWS.

Table 4.4-21
Recent CDFG Take Authorizations in Project Vicinity

Project Number	Project Name	Project Location	Project Impact Description	Relevant Species
2080-2001-029-05	I-5/Santa Clara River Bridge Replacement	City of Santa Clarita.	Unknown.	LBV, SWF, UTS*
2081-2002-008-05	SR 101 Santa Clara River Bridge Replacement	Santa Clara River Bridge where it is crossed by SR 101, between Post miles 22 and 24 in Ventura County.	The permanent destruction of 1.0 acres of habitat and temporary impacts to 0.9 acre of habitat during 4 breeding seasons.	LBV, SWF
2080-2003-018-05	I-5 Santa Clara River Bridge Replacement Additional Work Area	City of Santa Clarita.	Permanent acres-1.28; temporary acres-3.30.	LBV, SWF, UTS*
2081-1998-49-5	NRMP	Santa Clara River in Los Angeles County by City of Santa Clarita.	74 acres.	LBV, SWF, UTS*

*UTS - Unarmored Threespine Stickleback. *Discussed, but no take authorized.*
SWF - Southwestern Willow Flycatcher.
LBV - Least Bell's Vireo.
Source: CDFG, 2007, Recirculated Draft EIR**, Appendix 4.4**.

d. Individual Projects

Major residential/mixed use, commercial, and industrial projects of 700 or more acres within 5 miles of the project area, as well as larger-scale infrastructure projects involving the Santa Clara River, are listed below. A summary of these projects' size, location, and current status appears in the following table (**Table 4.4-22**). These projects are identified by the same numbers used in **Figure 4.4-11, Cumulative Individual Project Location Map**.

(1) Cumulative Impacts on Biological Resources

The Landmark Village proposed project's impacts to biological resources are summarized in **Table 4.4-10, Significant Impact and Mitigation Summary**.

The following discussion evaluates the proposed project's cumulative impacts on biological resources located within the SCRW. The cumulative impacts analysis relies heavily on the Watershed Study (see Landmark Village Final EIR [November 2007], Appendix A), which addresses impacts related to the Newhall Ranch Resource Management and Development Plan/Spineflower Conservation Plan

(RMDP/SCP) project, because the Landmark Village project site is included within the larger RMDP/SCP project area.

The evaluation of cumulative impacts also was based on two vegetation and land cover data sets: (1) for the RMDP/SCP project area, including the Landmark Village project site, project-level vegetation and land covers data were used, as summarized in **Table 4.4-23**; and (2) for areas outside of the RMDP/SCP project area boundaries, data provided by the California Gap Analysis Program (GAP) database (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**) were used, as these were the only other vegetation and land cover data available for the entire SCRW. The California GAP data were compiled in 1998 by overlaying existing land use maps, vegetation maps, and forest inventory data. The minimum mapping unit for upland vegetation communities was 100 hectares (247 acres), the minimum mapping unit for major wetland areas was 40 hectares (99 acres), and smaller wetlands were included with the same attributes as larger upland polygons. Thus, the California GAP vegetation database was mapped at a broader scale and necessarily lower precision than the RMDP/SCP project-level vegetation community and land cover mapping. Nonetheless, the GAP data provide reasonable estimates of watershed-wide vegetation community conditions (*i.e.*, acreage) that existed prior to 1998, and, in conjunction with the project-level data, have been used as a starting point for this assessment's quantitative evaluation of cumulative impacts to various types of vegetation communities and land covers. To estimate cumulative impacts to vegetation communities and land covers that have occurred since 1998, this analysis relied on an assessment of the development projects included on the list of past, present, and reasonably foreseeable future development projects. This list includes development projects located in the watershed area that were under consideration by Los Angeles County and the City of Santa Clarita during a period that generally extends between the late 1990s and 2008. Cumulative development projects within the study area located in Ventura County and the cities of Santa Paula and Fillmore include projects under consideration by those jurisdictions in late 2008 and early 2009.

The surveys, reports, studies, and maps referenced in this section are incorporated by reference, as permitted in section 15150 of the *State CEQA Guidelines*. All referenced documents are available for public inspection and review upon request to: County of Los Angeles, Department of Regional Planning, 320 West Temple Street Los Angeles, California 90012 (Samuel Dea; (213) 974-6461) or Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012 (Susan Tebo; (805) 437-1900). Additionally, many of these documents are included in the appendices to the Newhall Ranch Resource Management and Development Plan and the Spineflower Conservation Plan Draft EIS/EIR (SCH No. 2000011025), and can be obtained from the California Department of Fish and Game's Web site at http://www.dfg.ca.gov/regions/5/newhall/docs/.

Table 4.4-22
Individual Project Summary

Map ID	Name	Jurisdiction	Project Type	Location and Distance from Proposed Project	Residential Units/ Comm./Ind. Square Feet	Size (Acres)	Status
1	Ritter Ranch	City of Palmdale (Los Angeles County)	Residential/Mixed Use	South of Bouquet Canyon Road and Elizabeth Lake Road, west of Antelope Valley Freeway, and north of Sierra Highway; 40 miles east of the proposed project.	7,200	10,258	Partially Built Out
2	Centennial	Northern Los Angeles County	Residential/Mixed Use	Located on the Tejon Ranch, just south of the Kern County/Los Angeles County border, located next to SR-138, just east of I-5; 40 miles north of the proposed project.	23,000	11,700	Pending
3	Adams Canyon	City of Santa Paula	Residential/Mixed Use	West of SR-150; 22 miles west of the proposed project.	450	6,578	Pending
4	Valencia Industrial Center	Los Angeles County	Industrial Park and Commercial Retail	East of I-5, south of Newhall Ranch Road, and north of Magic Mountain Parkway; 0.25 mile northeast of the proposed project.	12,900,000	1,840	Completed
5	Legacy Village (Stevenson Ranch V)	Los Angeles County	Residential/Mixed Use	Adjacent to/southeast of the Newhall Ranch Specific Plan area.	3,425/ 840,200	1,759	Pre-Application
6	Tesoro del Valle (TR 51644)	Los Angeles County	Residential/Mixed Use	West side of San Francisquito Creek, north of Copperhill Drive; 5 miles northeast of the proposed project.	1,791	1,793	Under construction
7	Tapia Ranch (TR 53822)	Los Angeles County	Residential/Mixed Use	Tapia Canyon Road, west of Tesoro Residential Development. Access to the site currently via Parker Road exit from I-5; 4 miles east of the proposed project.	405	1167	Pending
8	Whittaker Bermite/ Porto Bello Project (TR 51599)	City of Santa Clarita	Residential/Mixed Use	West of Golden Valley Road, south of Soledad Canyon Road, and east of San Fernando Road; 3 miles east of the proposed project.	2911/ 609,832	996 (407 open space)	On hold pending remediation activities and bankruptcy proceedings.
9	West Creek/West Hills Valencia Project (TR 52445)	Los Angeles County	Residential/Mixed Use	West side of San Francisquito Creek, north of Newhall Ranch Road, and south of the Copperhill Drive bridge; 4 miles northeast of the proposed project.	2,545/ 180,000	966	Near buildout.
10	Westridge Project (TR 45433 & MP 19050)	Los Angeles County	Residential/Mixed Use	Just west of I-5, north of Stevenson Ranch, and directly south of Six Flags Magic Mountain Amusement Park; 0.5 mile east of the proposed project.	1,939/ 192,000	794	Under Construction
11	North Valencia Specific Plan No. 1 (Industrial Park)	City of Santa Clarita	Industrial and Business Park	South of Newhall Ranch Road, north of Magic Mountain Parkway, east of Rye Canyon Road, and west of Bouquet Canyon Road; 0.5 mile east of the proposed project.	2,000/ 803,000	707 (365 open space)	Completed

Map ID	Name	Jurisdiction	Project Type	Location and Distance from Proposed Project	Residential Units/ Comm./Ind. Square Feet	Size (Acres)	Status
12	RiverPark (TR 53425)	City of Santa Clarita	Residential/Mixed Use	Located at the eastern terminus of Newhall Ranch Road, east of Bouquet Canyon Road, and north of Soledad Canyon Road and the Santa Clara River; 4 miles east of the proposed project.	1,089/ 16,000	695	Under Construction
13	NRMP	Los Angeles County	Infrastructure	Approved NRMP for 1,200 acres of the Santa Clara River.	NA	NA	Approved and Partially Built Out
14	CLWA Reclaimed Water Master Plan (SCR)	Los Angeles County and the City of Santa Clarita	Infrastructure	Los Angeles County and the City of Santa Clarita; 6 miles north of the proposed project.	NA	NA	Approved
15	Santa Clara River Enhancement and Management Plan	Los Angeles and Ventura Counties	Infrastructure/Environmental	Santa Clara River from Acton to Pacific Ocean.	NA	NA	Approved
16	Santa Clarita Valley Joint Sewerage Facilities Plan	Los Angeles County	Infrastructure	Los Angeles County	NA	NA	Approved
17	Chiquita Canyon Landfill Expansion	Los Angeles County	Industrial	West of I-5, north of SR-126 at Wolcott Way; 0.5 mile north of the proposed project.	NA	98	Pending

Source:

1 *Final EIR, dated March 1992, Lead Agency City of Palmdale Planning Department; SCH No. 1990010124.*

2 *Notice of Preparation dated March 2004, Lead Agency Los Angeles County Regional Planning; SCH No. 2004031072; http://www.ceqanet.ca.gov, (September 22, 2008).*

3 *Two different projects have been proposed for this site. The Ventura County version would provide for 34 single-family lots ranging in size from 40 to 160 acres (SCH No. 2007021073, NOP dated February 2007, http://www.ceqanet.ca.gov, last visited on September 22, 2008). In May 2007, City of Santa Paula voters amended the City's urban restriction boundary to include Adams Canyon and amended the City's General Plan to allow 495 residential units, 100 acres of public recreation facilities, open space, a 40-acre school site, a hotel and a golf course on the site. (See http://www.ci.santa-paula.ca.us/adamscanyon/; http://recorder.countyofventura.org/Results/050807/Election%20Result.htm.) According to City planning staff, as of February, 2009, the current proposal for the site is 450 estate homes. Any proposed development on the site would still require discretionary approvals from the City Council (e.g., a specific plan and development agreement), and would require annexation to the City's jurisdiction before it could be developed with City approvals. (See http://www.ci.santa-paula.ca.us/adamscanyon/ImpartialAnalysis_A7.pdf.)*

4 *Applicant provided information.*

5 *Applicant provided information.*

6 *Initial Study dated 2/6/2007, Lead Agency Los Angeles County Regional Planning; SCH No. 1993021007.*

7 *Initial Study dated November 2006, Lead Agency Los Angeles County Regional Planning; SCH No. 2006121016.*

8 *SCH No. 1995101595 (cleanup being processed under SCH No. 2001051089); more information can be found at http://www.santa-clarita.com/cityhall/cd/planning/bermite.asp.*

9 *CEQA findings dated July 2005, Los Angeles County; SCH No. 1998021052.*

10 *Revised Draft EIR, dated May 1999, Lead Agency Los Angeles County Regional Planning; SCH No. 1990011146, containing text revisions to Draft EIR text based on comments received during the project review process. Los Angeles County certified the Final EIR for this project in May 1999.*

11 *Draft EIR, dated August 1997, Lead Agency City of Santa Clarita Planning Department; SCH No. 1996071077.*

12 *Draft EIR, dated March 2004, Lead Agency City of Santa Clarita; SCH No. 2002091081. The City of Santa Clarita certified a Final EIR for this project in May 2005. The Final EIR did not change the Draft EIR's conclusions regarding impacts and their significance.*

13 *CEQA findings from August 2003, California Department of Fish and Game; SCH No. 1997061090.*

14 *Draft EIR, dated November 2006, Lead Agency Castaic Lake Water Agency (CLWA); SCH No. 2005041138. The CLWA certified a Final EIR for this project in March 2007. The Final EIR did not change the Draft EIR's conclusions regarding impacts and their significance.*

15 *Document and information available at: http://www.santaclarariverparkway.org/wkb/projects/scremp, last visited on September 9, 2008.*

16 *Final EIR, dated January 1998, Lead Agencies County Sanitation Districts 26 and 32 of Los Angeles; SCH No. 1998109408.*

17 *NOP/IS dated July 20, 2005, Lead Agency Los Angeles County Regional Planning; SCH No. 2005081071.*

No other readily available sources of habitat data were determined to be available that would facilitate the analysis of cumulative impacts on a watershed-wide basis. By estimating impacts to vegetation communities and land covers reasonably expected to occur as a result of the identified past, present, and reasonably foreseeable development projects, and comparing those impact estimates to the available GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), reasonable characterizations of impact trends throughout the SCRW have been provided. Based on the review and analysis of the project list that has been prepared, conclusions regarding the effects of cumulative impacts have been provided that reflect the "severity of the impacts and their likelihood occurrence" as required by the *State CEQA Guidelines* (14. Cal. Code Reg. § 15130, subd. (b)). Although cumulative impacts are often expressed in this analysis in terms of acres and proportion of habitat loss, *etc.*, it should be recognized that these numbers are only meant to be estimates of cumulative impact conditions and trends, and not project-specific evaluations of impacts to biological resources in the watershed. Where acreages are reported for those areas outside of the RMDP/SCP project area, they should be considered approximations and not precise measurements. Because the California GAP data are general and the minimum mapping units are very coarse, these data cannot be used to provide specific analyses of impacts to habitats for wildlife and plant species. However, these data can be used to provide the context of the size of the watershed in relation to the impact associated with present and reasonably foreseeable projects.

Where acreages are reported throughout this cumulative impact analysis for the SCRW as a whole, and the California GAP vegetation database (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**) is referenced, the project-level mapping for the RMDP/SCP boundary has been incorporated into the reported acreage.

Table 4.4-23
Existing Vegetation Communities, Floristic Alliances and Associations, and Land Cover Types in Project Area

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance	Association	RMDP Acreage	VCC Acreage	Entrada Acreage
Grass and Herb Dominated Communities	Non-Native Grassland	California annual grassland	Not mapped to association level	2,175.5	71.1	53.2
	Native Grassland	Purple needlegrass	Not mapped to association level	0.6	0.0	0.0
Scrub and Chaparral	Coastal Scrub	California sagebrush scrub	Not mapped to association level	1,529.3	35.6	59.0
			Burned California sagebrush scrub	1,469.3	0.0	0.0
			California sagebrush–*Artemisia californica*	82.5	0.0	3.4
			California sagebrush–purple sage	393.5	0.0	0.0
			Disturbed California sagebrush–purple sage	4.5	0.0	0.0
		California sagebrush–black sage scrub	California sagebrush–black sage	196.3	0.0	0.0
		California sagebrush–California buckwheat scrub	Not mapped to association level	310.0	6.0	97.5
		California sagebrush scrub–undifferentiated chaparral	Not mapped to association level	135.0	0.0	0.0
			Burned California sagebrush scrub–undifferentiated chaparral	5.2	0.0	0.0
		Coyote brush scrub	Not mapped to association level	9.2	0.0	0.0
	Undifferentiated Chaparral Scrubs	Not mapped to alliance level	Not mapped to association level	1,106.9	0.0	24.5
			Burned undifferentiated chaparral	957.2	0.0	0.0
	Chaparral with	Chamise chaparral	Not mapped to association level	55.7	0.0	0.0

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance	Association	RMDP Acreage	VCC Acreage	Entrada Acreage
	Chamise		Burned chamise chaparral	0.0	0.0	0.0
	Chaparral with Oak	Scrub oak chaparral	Not mapped to association level	1.5	0.0	0.0
	Other Scrubs	Eriodictyon scrub	Not mapped to association level	0.2	0.0	0.0
Broad Leafed Upland Tree Dominated	Upland Walnut Woodland and Forest	California walnut woodland and forest	California walnut woodland	27.2	0.0	0.0
	Oak Woodland and Forest	Coast live oak forest and woodland	Coast live oak woodland	757.8	0.0	0.0
		Mixed oak woodland and forest	Not mapped to association level	168.9	0.0	0.0
		Valley oak forest and woodland	Valley oak woodland	79.4	0.0	0.0
			Valley oak/grass	461.4	0.0	0.0
Bog and Marsh	Marsh	Bulrush–cattail wetland	Not mapped to association level	1.4	0.0	0.0
		Cismontane alkali marsh	Not mapped to association level	18.6	0.0	0.0
		Fresh–brackish water marsh	Coastal and valley freshwater marsh	2.0	0.0	0.0
Riparian and Bottomland Habitat	Other Riparian/Wetland	Herbaceous wetland	Not mapped to association level	183.1	0.9	0.0
		River wash	Not mapped to association level	290.0	37.5	4.9
		Alluvial scrub	Not mapped to association level	1.0	0.0	0.5
		Big sagebrush scrub	Not mapped to association level	76.5	0.0	14.8
		Big sagebrush scrub	Big sagebrush-California buckwheat	0.5	0.0	0.0
		Giant reed	Not mapped to association level	5.6	0.0	0.0
	Low to High Elevation Riparian Scrub	Arrow weed scrub	Not mapped to association level	18.7	0.0	0.0
		Mexican elderberry	Not mapped to association level	12.8	0.0	0.0
		Mexican elderberry	Disturbed Mexican elderberry	0.3	0.0	0.0
		Mulefat scrub	Not mapped to association level	71.5	0.5	0.0
	Riparian Forest and	Southern willow scrub	Not mapped to association level	22.7	0.0	0.0

General Physiognomic and Physical Location	General Habitat Type	Floristic Alliance	Association	RMDP Acreage	VCC Acreage	Entrada Acreage
	Woodland	Tamarisk scrub and woodland	Shrub tamarisk	2.8	0.0	0.0
		Coast live oak forest and woodland	Southern coast live oak riparian forest	0.7	0.0	0.0
		Fremont cottonwood riparian forest and woodland	Southern cottonwood–willow riparian	358.3	63.4	0.0
Man-Made Land Cover Types		Agriculture	NA	1,576.4	40.5	0.0
		Developed land	NA	0.5	2.2	2.0
		Disturbed land	NA	1,080.6	63.7	56.2
		Total		13,651.1	321.4	316.0

This cumulative biology impacts analysis is organized into four separate discussions. The first addresses cumulative impacts to vegetation communities and land covers. The second addresses cumulative impacts to general wildlife (by species guild). The third addresses impacts to wildlife habitat linkages, wildlife corridors, and wildlife crossings (again, by species guilds). The fourth addresses impacts to special-status species, as such species are defined in **Subsection 4.4.7** of this EIR.

It should be noted that impacts associated with the RMDP/SCP are assessed as direct, indirect, and secondary. Direct and indirect impacts differ in regard to the Project component resulting in the impacts. As used here, direct impacts would occur as a result of implementation of the RMDP/SCP project and include temporary disturbance and/or permanent loss of vegetation communities, including sensitive vegetation communities, general wildlife, and special-status plant and animal species. For purposes of the impact analysis, the total loss of habitat for direct and indirect effects is evaluated in its entirety. Indirect impacts would occur as a result of buildout of the Newhall Ranch Specific Plan, Valencia Commerce Center (VCC), and Entrada planning areas. Indirect impacts also include permanent loss of vegetation communities, including sensitive vegetation communities, general wildlife, and special-status plant and animal species. For purposes of analyzing indirect impacts, any temporary disturbance areas are included in the permanent footprint. (There are no temporary impacts identified for buildout of the Specific Plan, VCC, and Entrada planning areas.)

Secondary impacts are those reasonably foreseeable effects caused by Project implementation on remaining or adjacent biological resources outside the construction disturbance zone. Secondary impacts may affect areas within the defined Project area, but outside the construction disturbance zone, including open space, and areas outside the Project area, such as downstream effects. Secondary impacts include short-term effects immediately related to construction activities and long-term or chronic effects related to the human occupation of developed areas. Both implementation of the RMDP/SCP project and buildout of the Specific Plan, VCC, and Entrada planning areas would result in short-term construction-related secondary impacts and long-term secondary impacts.

(2) Impacts to Vegetation Communities and Land Covers

As indicated in **Subsection 4.4.9.1.(a)**, Project Impacts, the following vegetative communities and land covers may be affected by the proposed Landmark Village project, and are assessed for cumulative impacts: riparian communities; California annual grassland; coastal scrub communities; chaparral communities; oak woodlands; agricultural land; and disturbed land. See **Table 4.4-9, Plant Community/Land Use Impact Summary**.

There are, however, a host of vegetation communities and land covers that do not occur in the RMDP/SCP project area, which encompasses the Landmark Village project, but occur elsewhere in the SCRW and are included in the California GAP vegetation database (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**). These include coniferous forests, black oak forest, Mojavean pinyon and juniper woodlands, bare exposed rock, and sandy areas other than beaches. Because the RMDP/SCP, including the Landmark Village project, would not affect these vegetation communities and land covers, they are not included in this cumulative analysis.

The cumulative analysis of impacts to vegetation communities and land covers is organized by three general themes, as follows.

The Santa Clara River Watershed is Relatively Undeveloped and Has Substantial Existing and Designated Open Space. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), as of 1998, approximately 52,000 acres of the 1,038,100-acre SCRW[20] had been converted to agricultural uses and approximately 47,300 acres had been converted to industrial, commercial, and urban uses. Combined, these developed uses comprise about 99,000 acres of the total watershed.[21] Based on the project-level mapping for the RMDP/SCP project area, including the Landmark Village project, and the California GAP data for areas outside of the RMDP/SCP project area, chaparral is the dominant vegetation community in the SCRW, accounting for about approximately 550,300 acres of the watershed. Coastal scrub comprises approximately 174,340 acres in the watershed. The third most common grouping includes higher elevation coniferous and black oak forests and Mojavean pinyon and juniper woodlands, which together account for about 14 percent of the SCRW; as noted above, however, none of these vegetation communities occur within the proposed RMDP/SCP project area, including the Landmark Village project. Riparian and lower elevation oak woodlands account for about 3 percent of the watershed. The remainder is made up of disturbed (but not developed) lands, annual grasslands, and other land covers.

Figure 4.4-18 shows that most of the approximately 99,000 acres of land converted to development land uses (*i.e.*, agriculture, and residential, commercial, industrial, infrastructure development) has occurred: (1) in the southern portion of the watershed along the Santa Clara River, where agricultural uses dominate; and (2) in the cities of Ventura, Santa Paula, Santa Clarita, and the communities of Valencia and Acton, where urban development dominates. It should be noted that **Figure 4.4-18** shows the California GAP data for the watershed outside of the RMDP/SCP project area. Because of large scale of

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20 The study area is defined as the Santa Clara River Watershed within Los Angeles and Ventura Counties (CalWater Version 2.2; http://gis.ca.gov/meta.epl?oid=22174)

21 **Table 4.4-24** provides a summary of vegetation communities and land covers based on the California GAP data and the project-level mapping for the RMDP/SCP project area, including the Landmark Village project.

the vegetation and land covered data shown in **Figure 4.4-18**, the project-level data for the RMDP/SCP project, including the Landmark Village project, cannot be clearly shown on this figure. The reader is referred to **Figures 4.4-19-A1** through **4.4-19-C2**, RMDP/SCP – Vegetation Communities and Land Covers, for the project-level detail. **Figure 4.4-18a** is also provided to reflect the vegetation community categories of **Table 4.4-24**.

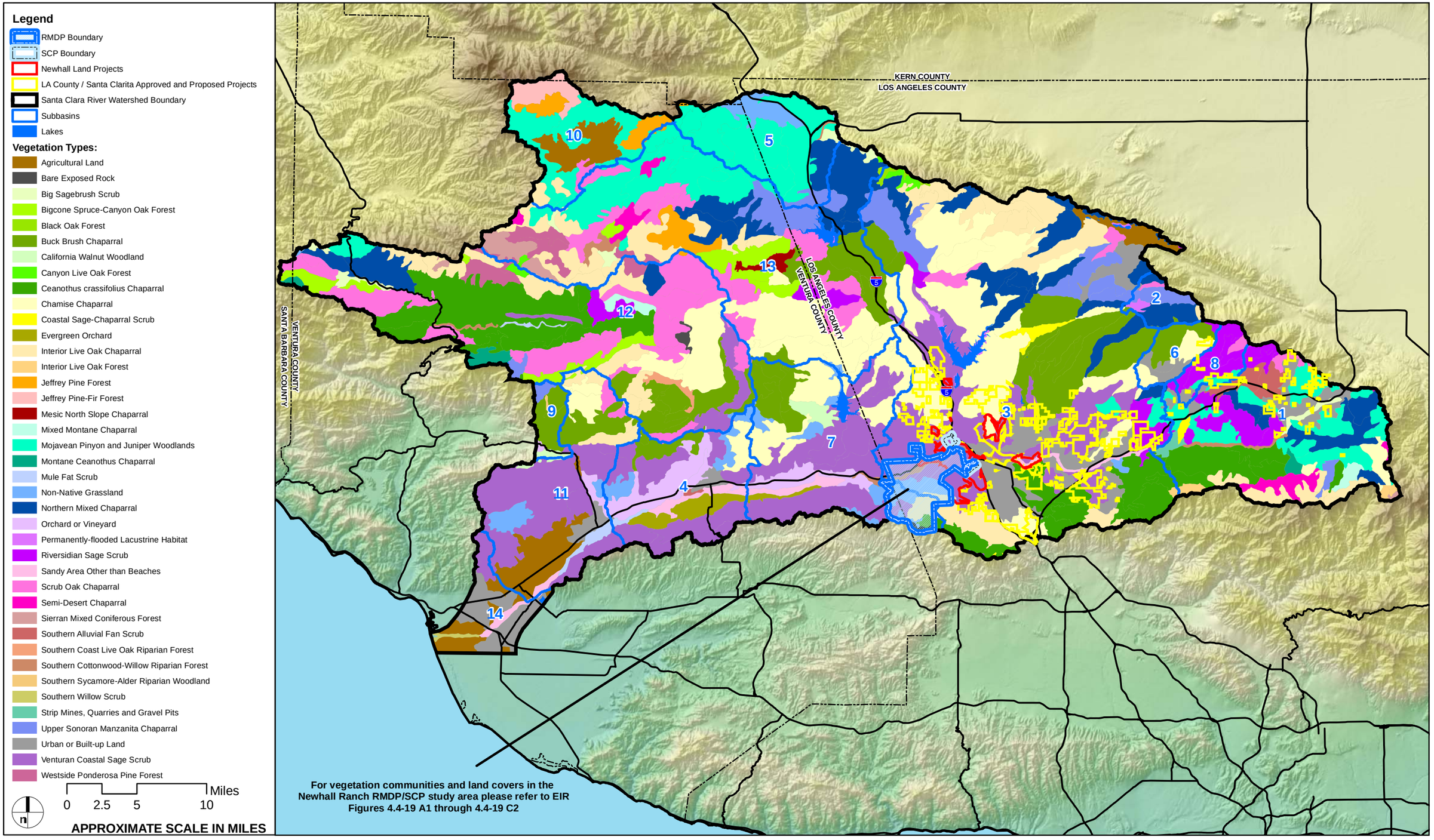
Approximately 734,000 acres of the SCRW either currently exist as open space or are classified as open space under available zoning information (**Figure 4.4-20**) (U.C. Davis 2004). Approximately 635,000 acres of the SCRW of this open space currently have a land use designation of federal (Bureau of Land Management, USFWS, U.S. Forest Service) and state (CDFG, Department of Parks and Recreation, State Lands Commission) public lands, as well as privately held reserves (The Nature Conservancy). The approximately 98,000 acres classified as open space under available zoning information is not currently protected as natural open space, and could be subject to several uses that are allowed under some open space designation, such as active recreation. Relatively large sub-basins with substantial existing and/or classified open space include Eastern (sub-basin 3), Hungry Valley (sub-basin 5), Topa Topa (sub-basin 12), and Upper Piru (sub-basin 13) (**Figure 4.4-20**). Most of the land within each of these sub-basins is open space: 55 percent of Eastern, 93 percent of Hungry Valley, 97 percent of Topa Topa, and 98 percent of Upper Piru. Eastern is the largest sub-basin. As a result, this sub-basin's approximately 160,000 acres of open space is second only to Upper Piru, which has approximately 165,000 acres of open space. Smaller sub-basins with high percentages of open space include Bouquet (sub-basin 2), Mint Canyon (sub-basin 6), Sisar (sub-basin 9), and Stauffer (sub-basin 10). Along the Santa Clara River mainstem, the NRMP upstream is conserving 4.7 miles, and the RMDP project will conserve 5 miles. An additional 13.7 miles are conserved within the County of Los Angeles, and approximately 33 miles are conserved within the County of Ventura.

Land Use Classification and Past, Present and Reasonably Foreseeable Projects. To assess the cumulative impacts of the proposed Landmark Village project to vegetation communities and land covers, **Table 4.4-9** provides a breakdown of the potential permanent loss of the different vegetation communities and land covers that would occur as a result of the proposed Landmark Village project, and **Table 4.4-24** provides a breakdown of the potential permanent loss of vegetation communities and land covers that would occur as a result of: (1) the proposed RMDP/SCP project, which encompasses the Newhall Ranch Specific Plan; and (2) present and reasonably foreseeable projects elsewhere in the SCRW.

As indicated in **Table 4.4-24**, the SCRW consists of approximately 1,038,100 acres of land and supports a variety of vegetation communities and land covers. As described above, the GAP data, although mapped at the broad, landscape level, is the best available data for vegetation communities and land covers in the SCRW outside the RMDP/SCP project area and are appropriate for the watershed-level analysis. The

project-level mapping data for the RMDP/SCP project area, including Landmark Village project were incorporated into this analysis. According to land use information provided by Los Angeles County and Ventura County, and by the cities of Santa Clarita, Ventura, Santa Paula, and Fillmore, and the community of Piru, approximately 47,300 acres (4.6 percent) of the watershed had been developed per the GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**). In addition, project list information from these government entities indicates that another 32,300 acres (3.1 percent) are expected to be developed in the foreseeable future, based on present and reasonably foreseeable future projects. Present and reasonably foreseeable future projects, including the proposed RMDP/SCP, including the Landmark Village project, would convert approximately 37,890 additional acres (3.6 percent) of the watershed to developed uses, resulting in a total of approximately 85,200 acres (8.2 percent) of watershed being developed.

From a specific vegetation community and land cover perspective, the impacts from such development (including the proposed RMDP/SCP project, which encompasses the Landmark Village project) is estimated to affect about 4.9 percent of existing California annual grassland, agriculture, and disturbed lands; 11.8 percent of existing coastal scrub communities, 2.3 percent of existing chaparral communities, and 4.2 percent of existing riparian communities within the watershed (although it is likely that there would be some level of avoidance of these riparian areas). Purple needlegrass grassland, of which 0.6 acre is mapped in the RMDP/SCP project area outside of the Landmark Village site, would not be removed as a result of grading activities, but would be at increased risk of non-native, invasive plant and animal species, litter, hydrological alterations, human disturbance, and modified fire frequency. At the broad scale and necessarily lower precision of the California GAP vegetation database (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), no oak woodlands or oak/grass vegetation communities were mapped outside of the RMDP/SCP project area within present and reasonably foreseeable development sites. The proposed RMDP/SCP project, however, would result in the loss of 95 acres of oak woodlands and oak/grass, including 2.4 acres within the proposed Landmark Village project site (see **Table 4.4-9**). It is anticipated that present and reasonably foreseeable development within the watershed also would result in impacts to oak woodland and oak/grass vegetation communities, but these impacts can not be quantified with existing information. Note also that, generally speaking, most of the existing and future projects in the watershed occur or would occur on slopes of 0 to 20 percent as these lower slopes are easier to grade and build upon than are steeper slopes, and are often adjacent to areas already developed.



SOURCE: GAP Analysis Project, Generalized Land Cover of California

FIGURE 4.4.-18

Landmark Village EIR

DUDEK

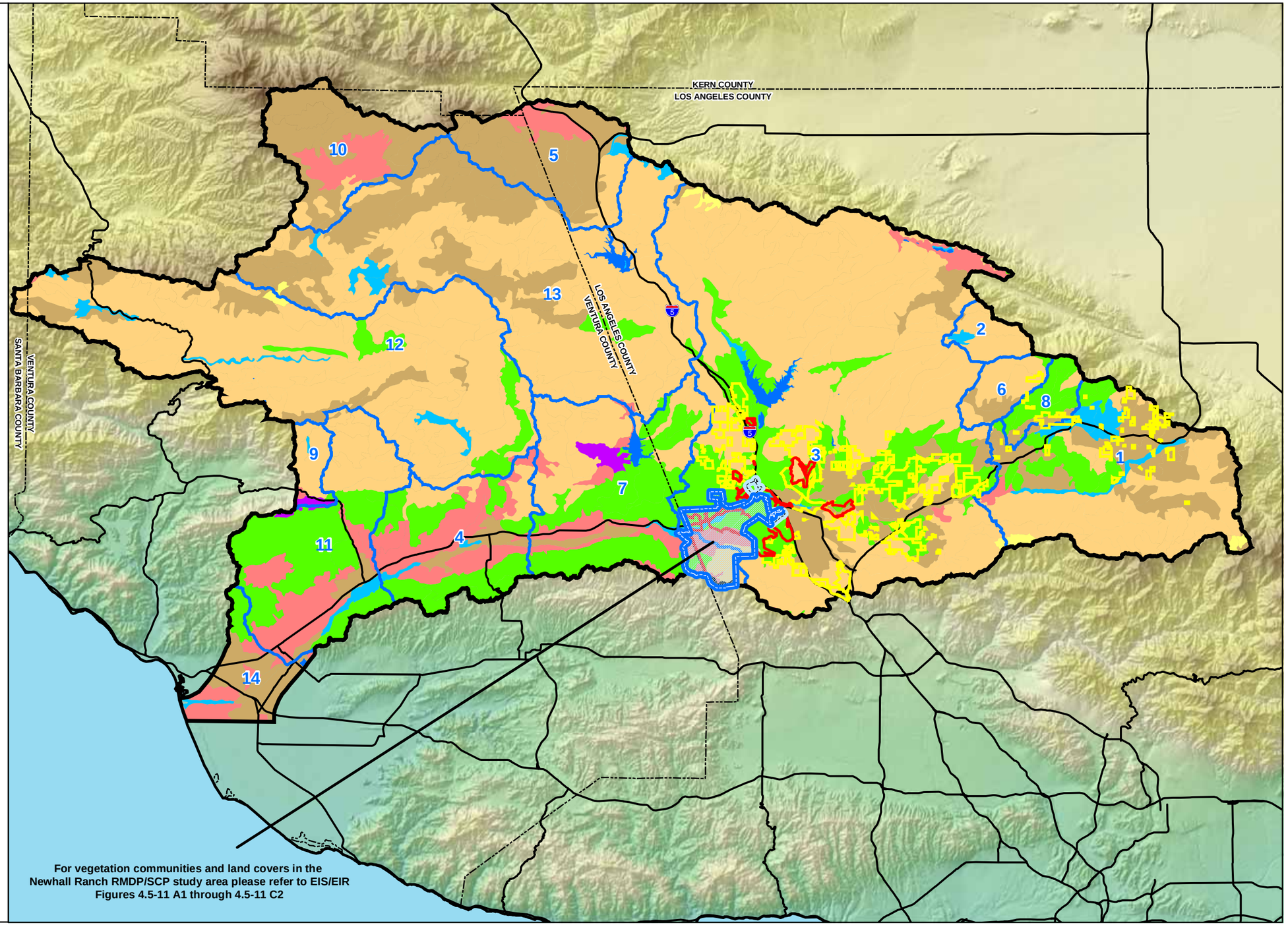
Santa Clara River Watershed - Existing Vegetation Types

Legend

- RMDP Boundary
- SCP Boundary
- Newhall Land Projects
- LA County / Santa Clarita Approved and Proposed Projects
- Santa Clara River Watershed Boundary
- Subbasins
- Lakes

Vegetation Types:

- CAG Ag Disturbed and Developed Land
- Chaparral Communities
- Coastal Scrub Communities
- Oak Woodland Communities
- California Walnut Woodland
- Other GAP Communities not Mapped
- Riparian Communities



For vegetation communities and land covers in the Newhall Ranch RMDP/SCP study area please refer to EIS/EIR Figures 4.5-11 A1 through 4.5-11 C2

0 2.5 5 10 Miles

APPROXIMATE SCALE IN MILES

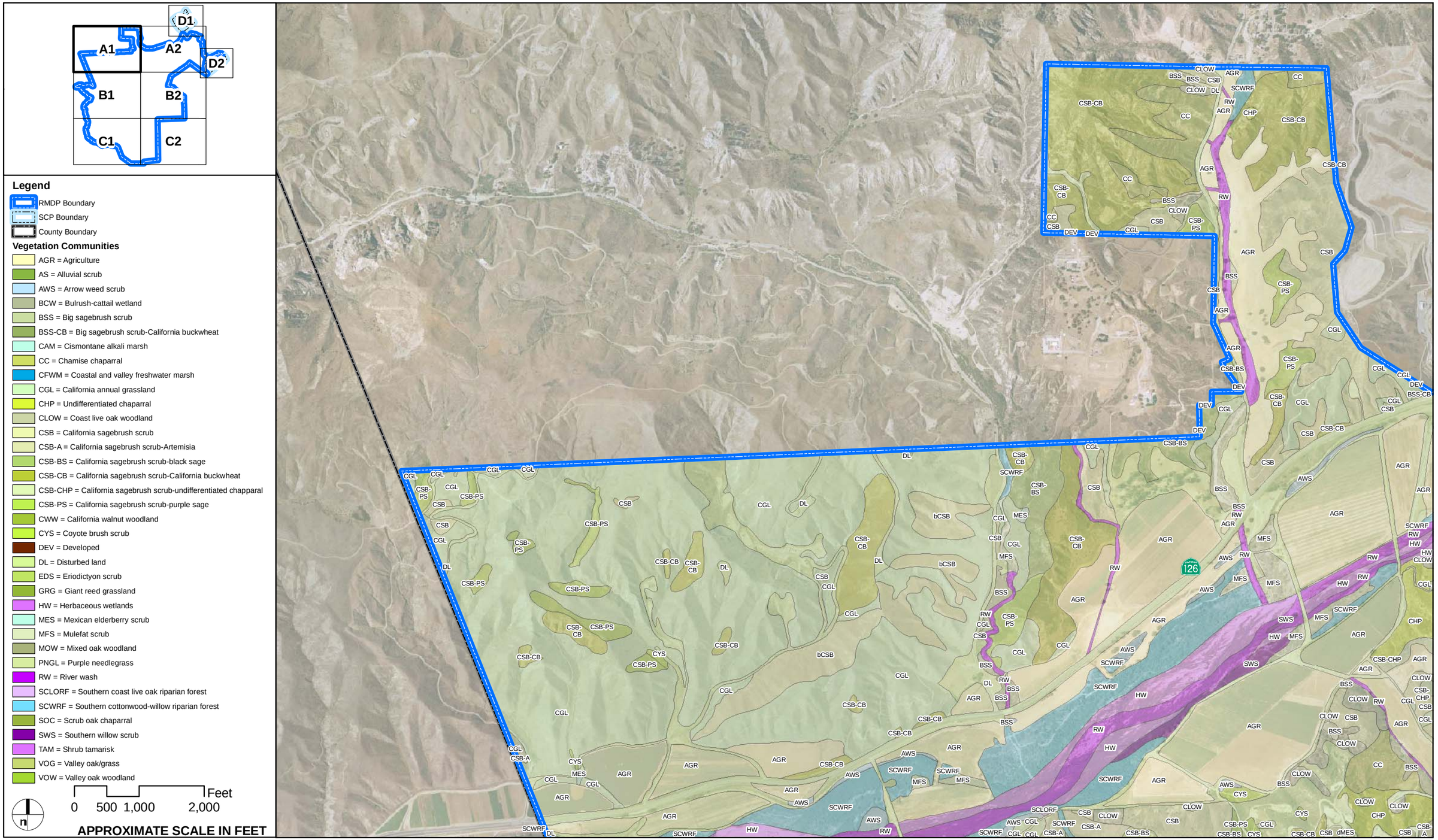
SOURCE: GAP Analysis Project, Generalized Land Cover of California

FIGURE 4.4-18a

DUDEK

Landmark Village EIR

Santa Clara River Watershed - Existing Vegetation Types



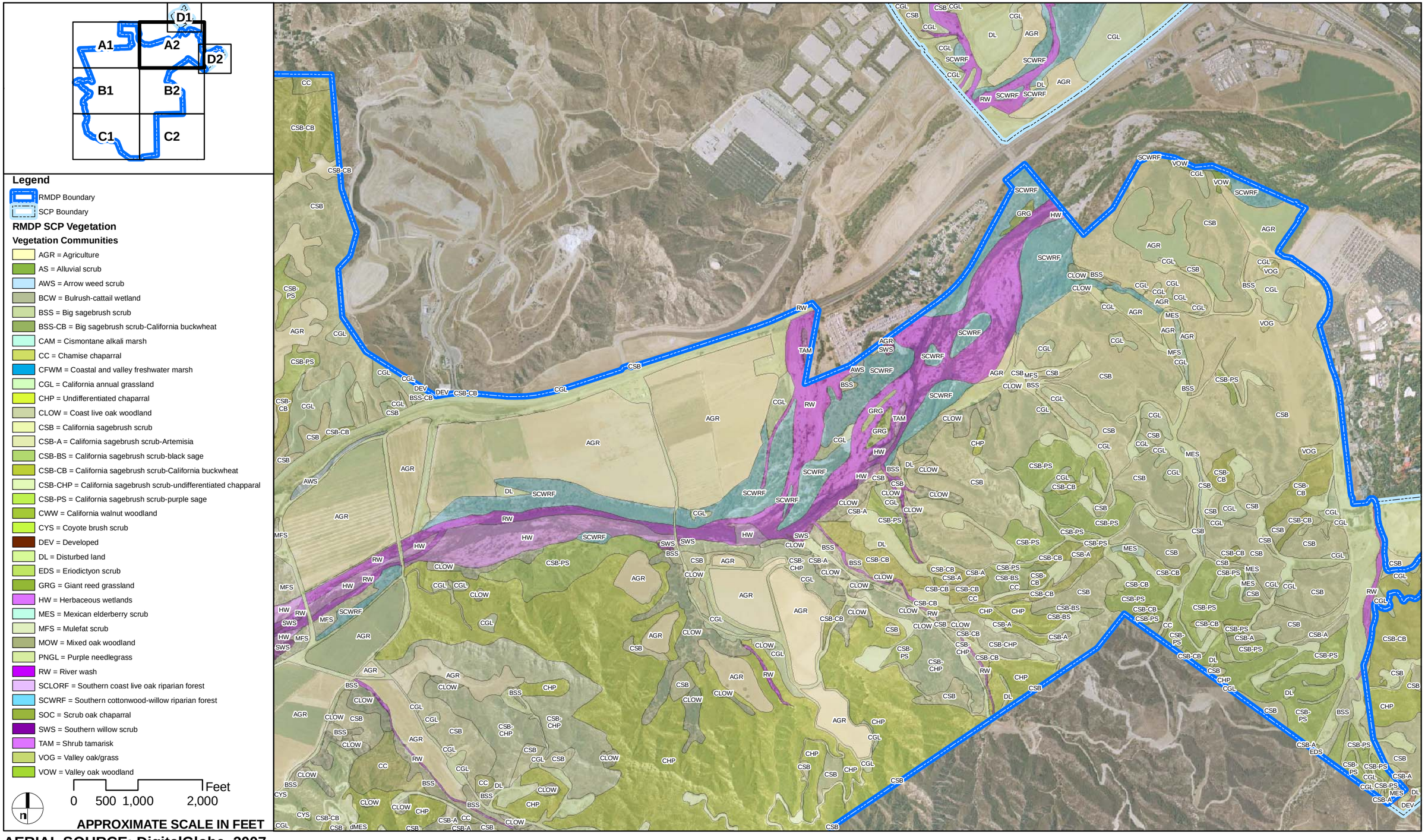
AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-19-A1

Landmark Village EIR

DUDEK

RMDP/SCP - Vegetation Communities and Land Covers



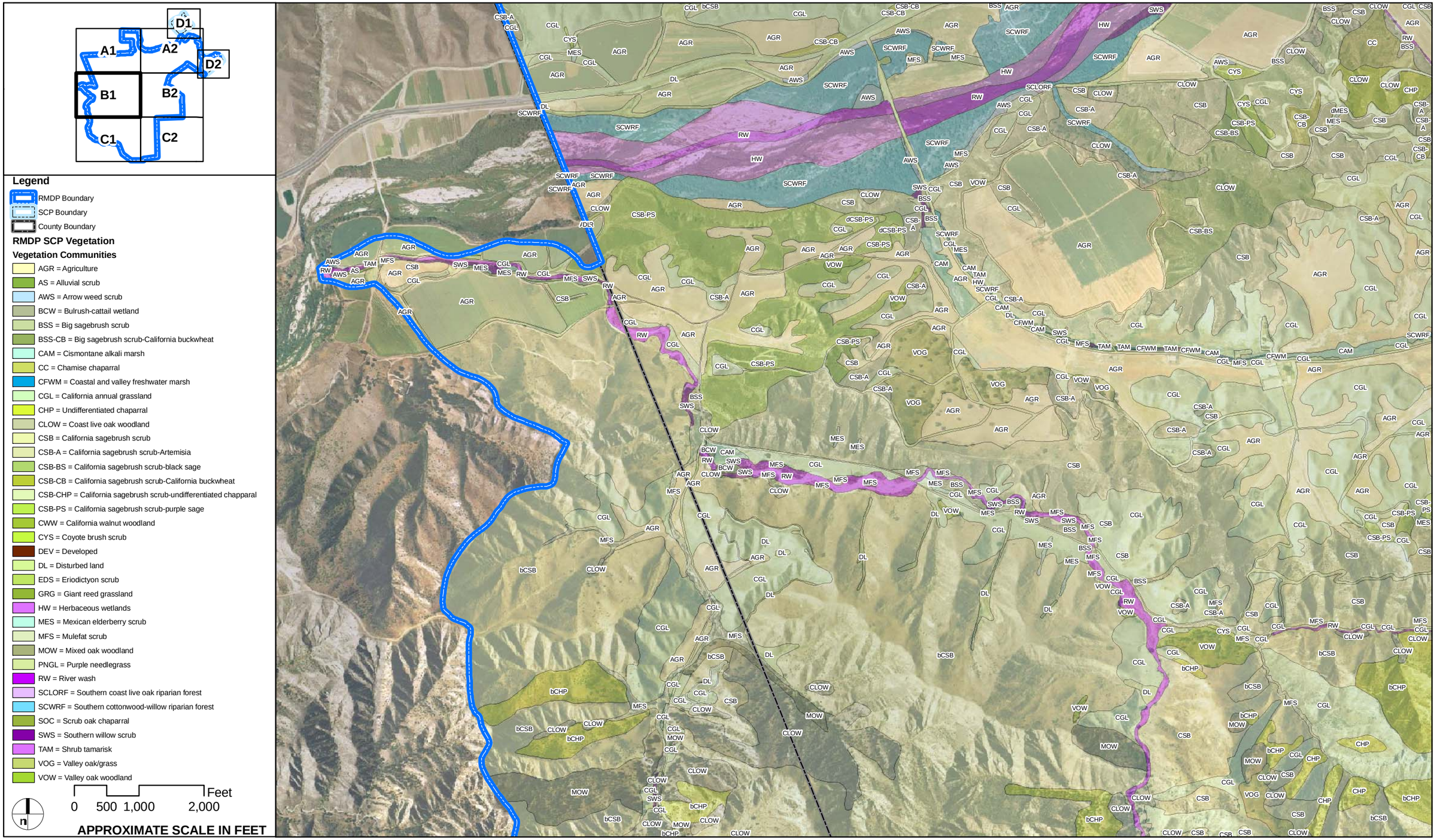
AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-19-A2

Landmark Village EIR

DUDEK

RMDP/SCP - Vegetation Communities and Land Covers



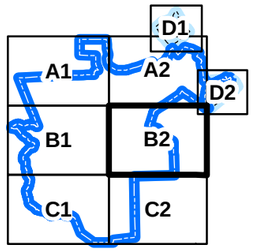
AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-19-B1

Landmark Village EIR

RMDP/SCP - Vegetation Communities and Land Covers

DUDEK



Legend

- RMDP Boundary
- SCP Boundary
- County Boundary

RMDP SCP Vegetation

Vegetation Communities

- AGR = Agriculture
- AS = Alluvial scrub
- AWS = Arrow weed scrub
- BCW = Bulrush-cattail wetland
- BSS = Big sagebrush scrub
- BSS-CB = Big sagebrush scrub-California buckwheat
- CAM = Cismontane alkali marsh
- CC = Chamise chaparral
- CFWM = Coastal and valley freshwater marsh
- CGL = California annual grassland
- CHP = Undifferentiated chaparral
- CLOW = Coast live oak woodland
- CSB = California sagebrush scrub
- CSB-A = California sagebrush scrub-Artemisia
- CSB-BS = California sagebrush scrub-black sage
- CSB-CB = California sagebrush scrub-California buckwheat
- CSB-CHP = California sagebrush scrub-undifferentiated chapparal
- CSB-PS = California sagebrush scrub-purple sage
- CWW = California walnut woodland
- CYS = Coyote brush scrub
- DEV = Developed
- DL = Disturbed land
- EDS = Eriodictyon scrub
- GRG = Giant reed grassland
- HW = Herbaceous wetlands
- MES = Mexican elderberry scrub
- MFS = Mulefat scrub
- MOW = Mixed oak woodland
- PNGL = Purple needlegrass
- RW = River wash
- SCLORF = Southern coast live oak riparian forest
- SCWRF = Southern cottonwood-willow riparian forest
- SOC = Scrub oak chaparral
- SWS = Southern willow scrub
- TAM = Shrub tamarisk
- VOG = Valley oak/grass
- VOW = Valley oak woodland

0 500 1,000 2,000 Feet

APPROXIMATE SCALE IN FEET

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-19-B2

Landmark Village EIR

RMDP/SCP - Vegetation Communities and Land Covers

DUDEK

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-19-C1

Landmark Village EIR

DUDEK

RMDP/SCP - Vegetation Communities and Land Covers

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-19-C2

Landmark Village EIR

DUDEK

RMDP/SCP - Vegetation Communities and Land Covers

KERN COUNTY
LOS ANGELES COUNTY
VENTURA COUNTY
SANTA BARBARA COUNTY
LOS ANGELES COUNTY
VENTURA COUNTY

10
5
13
12
9
7
2
6
8
3
1
11
4
14

Legend

- Newhall Land Projects
- LA County / Santa Clarita Approved and Proposed Projects
- Santa Clara River Watershed Boundary
- Public Ownership 2003
- Sub-Basins

Land Use:

- Agriculture
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Very Low Density Residential
- Low Density Commercial
- High Density Commercial
- Industrial
- Mixed Use
- Planned Development
- Open Space
- Lakes and Reservoirs

0 2.5 5 10 Miles

n

APPROXIMATE SCALE IN MILES

NOTE: The California Land Use dataset was compiled at the University of California, Davis. All county general plans and multiple city general plans were integrated into a statewide Geographic Information System (GIS) dataset. The data were then standardized to thirteen consistent land use classifications for the intent of natural resource and infrastructure planning. The data are freely available and distributed through the California Resources Agency.

LAND USE SOURCE: UC Davis 2004

FIGURE 4.4-20

Landmark Village EIR

DUDEK

Santa Clara Rive Watershed - Current Land Use Classifications

For example, in Los Angeles County, of the 6,774 acres of coastal scrub located on land zoned for development, 6,603 acres (97 percent) occur on slopes of 0 to 20 percent.

The Proposed RMDP/SCP Project Area Comprises a Small Proportion (0.5 percent**) of the Santa Clara River Watershed.** The proposed RMDP/SCP project area—defined as implementation of the RMDP/SCP project and buildout of the Specific Plan, VCC, and Entrada planning areas, which includes the Landmark Village project—would affect 0.5 percent (5,590 acres of approximately 1,038,100 acres) of the vegetation communities and land covers that are in the watershed (**Table 4.4-24**). The proposed RMDP/SCP project is confined to a substantially urbanized area of one sub-basin—the Eastern sub-basin (sub-basin 3)—which has the most existing developed uses in the watershed (**Figure 4.4-18**). Nonetheless, this sub-basin supports several federal- and/or state-listed threatened and endangered species such as unarmored threespine stickleback, arroyo toad, least Bell's vireo, and San Fernando Valley spineflower. Development in this sub-basin increases the potential for cumulative effects to these species. The proposed RMDP/SCP project is downstream of, and contiguous with, urban development in the City of Santa Clarita and the community of Valencia. The proposed RMDP/SCP project would not affect the headwaters of the Eastern and Santa Felicia sub-basins (sub-basins 3 and 7, respectively). The RMDP study area includes approximately 5 miles of the Santa Clara River mainstem (6 percent of the overall mainstem total); 1.4 of the 5 miles occurs within or adjacent to the Landmark Village project site. The entire Santa Clara River mainstem is 86 miles long (The Nature Conservancy 2006); approximately 48 miles within the County of Los Angeles and 38 miles within the County of Ventura.

As shown in **Table 4.4-24**, the great majority of the SCRW watershed is currently undeveloped. Approximately 4.6 percent of the watershed has been converted to agricultural, industrial, commercial, and urban uses. Based on the project lists from the affected jurisdictions in the watershed (including the proposed RMDP/SCP, including the Landmark Village project) a total of about 3.6 percent (37,890 of 1,038,100 acres) of vegetation communities and land covers in the SCRW could be developed at some point in the future. Adding this to existing development (approximately 47,300 acres) would result in a total cumulative impact of approximately 8.2 percent (85,000 acres of 1,038,100 acres) of the SCRW. Without accounting for past, present, or reasonably foreseeable mitigation and the proposed RMDP/SCP project's individual contribution to the above impacts to vegetation communities and land covers, the estimated loss of vegetation communities and land covers in the SCRW could be a potential significant cumulative impact.

Table 4.4-24
Summary of Cumulative Impacts to Vegetation and Land Covers in the Santa Clara River Watershed (GAP Data are Approximate)

Vegetation Communities and Land Covers	California GAP Vegetation Communities	Total Acres of Vegetation Communities and Land Covers in Watershed	Permanent Direct and Indirect Impact Acres of Proposed Project (RMDP/SCP)[1]	Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including Proposed RMDP/SCP Project)	Estimated Cumulative Impact Acres in Watershed, After Accounting for the RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects
Riparian Communities	Mulefat scrub Permanently flooded lacustrine habitat Southern coast live oak riparian forest Southern cottonwood/willow riparian forest Southern sycamore/alder riparian woodland Southern willow scrub Big sagebrush scrub Southern alluvial fan scrub	GAP = 23,430 RMDP/SCP = 1,190 Total = 24,620	225	800	1,025 (4.2% for water shed; <0.1% for RMDP)
California Annual Grassland, Agriculture, and Disturbed Land	Non-native grassland Open pit mines, quarries, gravel pits Agriculture land Evergreen orchard Orchard or vineyard	GAP = 72,760 RMDP/SCP = 5,120 Total = 77,880	3,290	500	3,790(4.9% for water shed; 4.2% for RMDP)
Coastal Scrub Communities	Coastal sage/chaparral scrub Riversidean sage scrub Venturan coastal sage scrub	GAP = 170,000 RMDP/SCP = 4,340 Total = 174,340	1,520	19,000	20,520 (11.8% for water shed; <0.1% for RMDP)
Chaparral Communities	Buck brush chaparral Ceanothus crassifolius chaparral Chamise chaparral Interior live oak chaparral Mesic north slope chaparral Mixed montane chaparral Montane ceanothus chaparral Northern mixed chaparral Scrub oak chaparral Semi-desert chaparral Upper Sonoran manzanita chaparral	GAP = 548,150 RMDP/SCP = 2,150 Total = 550,300	460	12,000	12,460 (2.3% for water shed; <0.1% for RMDP)
Oak Woodland Communities (Coast Live Oak Woodland, Mixed Oak Woodland, Valley Oak/Grass, Valley Oak Woodland)	Canyon live oak forest Interior live oak forest	GAP = 3,700 RMDP/SCP = 1,470 Total = 5,170	95	0	95 (1.8% for water shed; 1.8% for RMDP)
California Walnut Woodland	California walnut woodland	GAP = 3,600 RMDP/SCP = 27 Total = 3,627	<1	0	<1(,0.1% for water shed; <0.1% for RMDP)
Total—California GAP Vegetation + RMDP/SCP Project Impacts		**835,950**	**5,590**	**32,300**	**37,890**

Vegetation Communities and Land Covers	California GAP Vegetation Communities	Total Acres of Vegetation Communities and Land Covers in Watershed	Permanent Direct and Indirect Impact Acres of Proposed Project (RMDP/SCP)[1]	Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including Proposed RMDP/SCP Project)	Estimated Cumulative Impact Acres in Watershed, After Accounting for the RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects
Other California GAP Vegetation Communities and Land Covers Occurring in SCRW but Not Mapped in RMDP/SCP project Area, including Landmark Village project area, in GAP Data Set[2]					
Other California GAP Woodland/Forest Communities not Mapped in RMDP/SCP project Area	Bigcone spruce/canyon oak forest Black oak forest Jeffrey pine/fir forest Mojavean pinyon and juniper woodlands Sierran mixed coniferous forest Westside ponderosa pine forest	145,850	N/A	N/A	N/A
Other California GAP Natural Land Covers not Mapped in RMDP/SCP project Area	Bare exposed rock Sandy areas other than beaches	9,000	N/A	N/A	N/A
Other California GAP Man-made Land Covers not Mapped in RMDP/SCP project Area	Urban or built-up land	47,300	N/A	N/A	N/A
Grand Total for SCRW		**1,038,100**	**N/A**	**N/A**	**N/A**

Notes:

[1] *The impacts based on the project-level mapping.*

[2] *These California GAP vegetation communities and land covers do not occur in the proposed RMDP/SCP project area, including the Landmark Village project, based on the California GAP data set and, therefore, are not a part of the cumulative impact analysis. They are shown in the table to illustrate the vegetation communities and land covers within the SCRW.*

Past, present, or reasonably foreseeable mitigation, other than for the proposed RMDP/SCP project, is difficult to estimate within the context of this cumulative analysis because of the variety of size, type, and impact of each past, present, or reasonably foreseeable project. In particular, for upland vegetation communities (*e.g.*, coastal scrub, chaparral, and grassland), depending on whether the impact is significant, mitigation in terms of replacement acreage may or may not have been, or be, required. Without a state- and/or federally listed species inhabiting impacted areas (*e.g.*, coastal California gnatcatcher occupation of coastal scrub), regulation of impacts of upland vegetation communities and requirements for mitigation are variable. Projects that have special-status vegetation communities and/or species on site often have and would require some set aside of open space. In addition some development projects may be required to provide habitat conservation areas.

For state and federal jurisdictional wetlands (including riparian) subject to regulation under Fish and Game Code section 1600 *et seq.* and Clean Water Act (CWA) section 404 (33 U.S.C. 1251 *et seq.*), CDFG and Corps implement "no net loss" policies as part of their respective permitting process for impacts to wetlands. California Executive Order W-59-93 established a State Wetland Conservation Policy (SWCP) that provides for the preservation and protection of wetland communities (State of California Executive Department 1993). A central goal of the SWCP is to ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreages and values. Similarly, per a 1990 Memorandum of Agreement (MOA) between the EPA and the Corps to demonstrate compliance with the CWA section 404(b)(1) guidelines, it is the policy of the Corps to achieve the goal of no overall net loss of wetlands functions and values/services, although it is recognized in the MOA that no net loss of functions and values/services may not be achieved in every permit action (EPA and U.S. Army 1990). With these policies in place, it is reasonable to assume that the permanent cumulative impacts to jurisdictional wetlands would be substantially less than estimated for this analysis.

Oak woodlands also receive some level of protection that would reduce permanent cumulative impacts. As described in **Subsection 4.4.7.2.a.2.b**, Oaks, the County of Los Angeles Oak Tree Ordinance (CLAOTO) regulates impacts to oak trees with trunks that are at least 8 inches in diameter (or that have two trunks totaling at least 12 inches in diameter) as measured 4.5 feet above natural ground (County of Los Angeles 1988). CLAOTO requires that all potential impacts to regulated oak trees be reported in a detailed oak tree report and usually requires mitigation as a condition of an Oak Tree Permit issued by the County. Ventura County also has "Tree Protection Regulations" (County of Ventura 1992) that regulate impacts to oak trees in unincorporated areas of the County that are at least 9.5 inches in circumference (or that have two or more trunks with at least one of the trunks 6.25 inches in circumference) as measured at 4.5 feet above the ground. Impacts to oak trees in Ventura County are mitigated per the Ventura County Non-Coastal Zoning Ordinance section 8107-25.10 - Offsets for Altered,

Felled, or Removed Trees, which requires a minimum 1:1 ratio of mitigation. The proposed mitigation encompasses a three-part strategy that incorporates (1) planting replacement trees, per the requirements of CLAOTO and previously incorporated measure SP-4.6-48; (2) additional replacement ratios recommended in this EIR for impacts to oak trees and oak woodlands where they occur within stream channels falling under CDFG and Corps jurisdiction, per 1600 and 404 (LV 4.4-1); and (3) additional measures recommended in this EIR for tree replacement or woodland restoration/enhancement to mitigate for oak trees and woodland occurring in uplands outside CDFG and Corps jurisdiction at a minimum ratio of 2:1 (LV 4.4-29). With these regulations, it is reasonable to assume that the permanent cumulative impacts to oak woodlands would be substantially less than would occur absent mitigation.

Of the approximately 85,200 acres that are either developed currently or, based on the project list, expected to be developed in the foreseeable future, the proposed RMDP/SCP project would consume 5,590 acres of the approximately 37,890 acres of impact from recent past, present, and reasonably foreseeable future projects. CEQA requires an analysis of whether this contribution to a significant impact can be rendered less than "cumulatively considerable," as that term is defined under CEQA (14. Cal. Code Reg. § 15130):

> *An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable* if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. *The Lead Agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.* (emphasis added)

As to the proposed Landmark Village project, the Newhall Ranch Specific Plan Program EIR and this EIR impose measures on the applicant to mitigate the loss of vegetation communities. These measures include: (1) replacing the functions and values/services of riparian vegetation communities that may be lost through construction; and (2) the dedication and maintenance of existing natural lands in the Open Area, River Corridor SMA, High Country SMA, and Salt Creek area, totaling approximately 9,753 acres. Mitigation also includes compliance with permits from federal and state agencies for impacts to wetlands and water quality (*i.e.*, NPDES and section 401 water quality certifications, section 404 individual permits, and section 1602 Streambed Alteration Agreements). Mitigation for impacts to wetlands would achieve the goals of CDFG's and Corps' "no net loss" policies described above and, therefore, would result in no cumulative contribution to impacts to jurisdictional wetlands. Overall, these mitigation measures would offset the proposed Landmark Village project's direct removal of most vegetation communities in the proposed project area. The measures also would offset potential secondary impacts to purple needlegrass grassland outside of the Landmark Village project area.

Thus, with the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this Landmark Village EIR (see **Subsection 4.4.10, Project Mitigation Measures**), the proposed Landmark Village project would not result in a cumulatively considerable contribution to potential significant cumulative impacts on all of the vegetation communities and land covers in the SCRW, except for coastal sage scrub. (See **Subsection 4.4.12.b** of this EIR.)

The California GAP vegetation (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**) and the project-level mapping for the RMDP/SCP project area include approximately 174,000 acres of coastal scrub in the SCRW, including 231.9 acres in the Landmark Village project site (see **Table 4.4-9**). Without accounting for the proposed RMDP/SCP project, other past, present, and reasonably foreseeable future projects within the SCRW result in a loss of approximately 19,000 acres of coastal scrub since the California GAP data were compiled. Beginning well before 1998, coastal scrub already had been extensively cleared throughout much of California for various land use changes (mainly agriculture and urbanization). For example, Westman (1981) analyzed historic losses of coastal scrub state-wide and estimated that only about 15 percent of its original acreage was still extant at that time. Most coastal scrub occurs on relatively gentle slopes (0 to 20 percent where land use conversions for agriculture and development tend to be concentrated because these lands are more developable. The SCRW has been less extensively developed than other regions in southern California and coastal scrub loss in the watershed probably has been proportionally less than Westman's (1981) state-wide estimate. Still, it is likely that much of the upland agricultural land mapped by the 1998 California GAP project in the SCRW supported coastal scrub habitat prior to these land use conversions. The acreage of coastal sage scrub lost prior to 1998, however, cannot be quantified for this analysis.

Most coastal scrub alliances and associations mapped on the RMDP/SCP project site are ranked as G4S4 by CDFG (2007, Recirculated Draft EIR**, Appendix 4.4**), meaning that they are "apparently secure" both globally and within California, "but factors exist to cause some concern; *i.e.*, there is some threat." For coastal scrub, the primary concerns are the extensive and ongoing habitat loss (Westman 1981; O'Leary 1990). Further, coastal scrub is used almost exclusively by the federally-listed threatened coastal California gnatcatcher (Atwood 1993), and many other special-status species occur regularly in coastal scrub (Davis *et al.* 1994). In addition to land use conversions, much coastal scrub vegetation has been lost due to secondary effects of population increases and land development throughout southern California. These effects include habitat fragmentation, invasive non-native species, livestock grazing, off-highway vehicles, altered fire regime, and perhaps air pollution (O'Leary 1995; Minnich and Dezzani 1998; Rundel 2007). Some coastal scrub vegetation occurs on National Forest lands, where land use management is generally compatible with habitat conservation, but these areas tend to be at its upper elevational limits,

where many of the special-status species associated with coastal sage scrub are less common or absent (Stephenson and Calcarone 1999).

Based on this analysis, the proposed RMDP/SCP project and other past, present, and reasonably foreseeable future projects would result in a cumulative loss of approximately 20,500 acres of coastal scrub in the SCRW. This loss represents about 54 percent of the total 37,890 acres loss of all vegetation communities in the SCRW due to past, present, and reasonably foreseeable projects, including the proposed RMDP/SCP project; *i.e.*, most of this development in the watershed has or will take place on land dominated by coastal scrub. The proposed RMDP/SCP project's direct (RMDP/SCP) and indirect (buildout of the Specific Plan, VCC, and Entrada planning areas, including Landmark Village) effects would result in the permanent removal of approximately 1,520 acres of coastal scrub communities, including 231.9 acres within the Landmark Village project area (see **Table 4.4-9**), or about 35 percent of the 4,340 acres of coastal scrub communities present in the RMDP/SCP project area; proportionally lower than the overall estimated loss, but still substantial. Also, when considered from a landscape level, the coastal scrub community on site represents a relatively large, intact tract within this portion of the SCRW. Due to coastal scrub's high habitat value for a variety of special-status plants and wildlife, the extensive coastal scrub losses in southern California prior to 1998, and the substantial acreage lost as a result of past, present, and reasonably foreseeable projects, including the proposed RMDP/SCP project, the loss of 20,500 acres of coastal scrub could be a potential significant cumulative effect. The proposed Landmark Village project's contribution to this loss would be cumulatively considerable.

Whether the proposed Landmark Village project's cumulatively considerable contribution to the potential significant cumulative effect of coastal scrub loss in the SCRW can be reduced to a level less than significant is considered in the broader context of conservation planning for the community. In some regions of southern California, regional planning projects have been designed to limit continued losses of coastal scrub (*e.g.*, state Natural Community Conservation Planning (NCCP) and federal Habitat Conservation Plan (HCP) programs). These programs are designed to preserve large, contiguous tracts of coastal scrub and other natural vegetation communities in permanent managed open space areas and to minimize fragmentation and other secondary impacts to these preserved areas to mitigate for the losses that do occur. There is currently no similar comprehensive, large-scale planning effort in the SCRW to ensure long-term coastal scrub conservation in large, unfragmented tracts within the watershed.

In addition, long-term secondary (off-site) impacts to coastal scrub would occur near developed areas after project buildout. These landscape-level impacts and "edge" effects include the increased risk of non-native, invasive plant and animal species (*e.g.*, Argentine ants), human disturbance (*e.g.*, trampling, illegal trails), and shortened fire intervals that could result in type conversion of coastal scrub to annual grassland. These RMDP/SCP project-induced secondary impacts to coastal scrub are mitigated at the

project level to a level less than significant primarily through dedication of lands in the High Country SMA, River Corridor SMA, Salt Creek area, which include approximately 1,900 acres of coastal scrub, as well as preservation of smaller patches in Open Areas within or adjacent to the proposed development areas.

Despite implementation of the mitigation measures required by the Newhall Ranch Specific Plan Program EIR and recommended by this EIR, implementation of the proposed RMDP/SCP project would result in a net loss of approximately 1,520 acres of coastal scrub, including 231.9 acres within the Landmark Village project. In the context of the extensive historical losses of coastal scrub in southern California, the estimated loss of 20,500 acres in the watershed as a result of the proposed Landmark Village project and other past, present, and reasonably foreseeable future projects within the SCRW; the importance of this habitat to a variety of special-status plants and animals; and the absence of a regional conservation effort to conserve or manage remaining coastal scrub in the watershed, the proposed Landmark Village project would result in a cumulatively considerable contribution to a potential significant and unavoidable cumulative loss of coastal scrub in the SCRW.

(3) Impacts to Common Wildlife Organized by Species Guilds and Other Associations

The cumulative impact analysis for common wildlife also uses the "project list" approach for the watershed, as applied to the wildlife guilds shown in **Table 4.4-25**. For each wildlife guild or other association, the habitat relationships were analyzed in the same manner as the vegetation communities and land covers described above in **Subsection 4.4.11.c.1**.

The Santa Clara River Watershed is Relatively Undeveloped and Has Substantial Existing and Designated Open Space Providing Habitat For Wildlife. As shown in **Table 4.4-24**, approximately 991,000 acres of the SCRW are currently undeveloped and capable of providing habitat for wildlife.[22] With regard to vegetation communities and land covers mapped in the proposed RMDP/SCP project area that also occur elsewhere in the watershed, the watershed includes approximately 836,000 acres. The amount of undeveloped habitat for the different wildlife guilds in the SCRW ranges from approximately 5,200 acres of oak woodlands for the Bird – Upland Woodland guild to approximately 836,000 acres for the Insect and Bat guilds.[23] This latter figure reflects the fact that insects and bats can use virtually all the undeveloped habitat in the SCRW. Of the approximately 991,000 acres of undeveloped land in the SCRW,

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22 This approximately 991,00 acres figure is derived by subtracting the number of existing development acres (47,270) from the total size of the entire SCRW (1,038,100 acres).

23 This does not mean, however, that species in each guild actually use all of the available habitat; nor does it mean that species in each guild have been observed on each acre of available habitat. For example, agricultural and disturbed lands are considered habitat for the Insect and Bat guilds and, therefore, are included in the total acreage of habitat for these guilds; however, both insects and bats tend to concentrate activities in microhabitats within the larger landscape and, therefore, are not uniformly distributed through the 836,000 acres.

approximately 734,000 acres are existing or classified open space (**Figure 4.4-20**), including 635,000 acres of lands designated for public use. Of the 734,000 acres of existing or classified open space, approximately 593,000 are comprised of the types of vegetation communities and land covers occurring on the proposed RMDP/SCP Project.

Cumulative Net Increase in Jurisdictional Waters and Wetlands Providing Wildlife Habitat. Waters and wetlands are critical resources for several of the wildlife guilds. The guilds most reliant on waters/wetlands throughout the SCRW include the Reptile and Amphibian – Semi-Aquatic guild, the Fish guild, the Bird – Riparian guild, and the Bird – Raptor guild (primarily for raptor nesting habitat). As shown in **Table 4.4-25** (Summary of Cumulative Impacts to Wildlife Guilds in the Santa Clarita River Watershed), a small proportion of the habitat used by these guilds have been or would be affected by development in the SCRW. Also, according to the Watershed Study (Dudek 2007), mitigation measures for activities permitted by CDFG and Corps between 1988 and 2006 in Los Angeles and Ventura counties have resulted in a cumulative net increase in jurisdictional waters/wetlands in the SCRW. These estimated net increases are consistent with CDFG's and Corps' "no net loss" policies for wetlands discussed above. Although the Watershed Study acreages assume 100 percent mitigation success, and although it is likely that some of the mitigated acreage has not been successful for various reasons (*e.g.*, poor design, inappropriate soils or hydrology, poor maintenance), it is reasonable to conclude that there has been no net cumulative loss of waters/wetland acreage from agency-permitted activities in the watershed since 1988 because of the estimated net increases. However, as concluded by Ambrose *et al*. (2006), acreage losses and gains resulting from agency-permitted activities do not always reflect wetland functions and values/services, and hence, wildlife habitat value. Based on Ambrose *et al.*'s (2006) review of 143 section 401 permits across 12 regional Water Boards and subregions in California, approximately 27 percent of mitigation acreage consisted of drier riparian and upland habitats that were outside of jurisdictional areas. Wildlife species that rely on wetter habitats, such as semi-aquatic amphibians and reptiles, may not use the drier riparian and wetland habitats to the same extent or for certain phases of their life cycle (*e.g.*, reproduction).

Although the success of past permitted activities likely has been mixed with regard to mitigation for impacts to waters and wetland functions and values/services, new projects are approved and constructed with updated technologies for protecting and restoring waters/wetlands. With these new technologies, the functions and values/services of the waters and wetlands within the SCRW are expected to be enhanced in the future. To this end, the Landmark Village project applicant would implement conservation measures that are designed to permanently preserve the Santa Clara River corridor and portions of tributary drainages through the proposed Landmark Village project reach and to protect and manage the waters/wetlands on the proposed Landmark Village project site. These conservation measures include previously incorporated mitigation measures from the Newhall Ranch Specific Plan Program EIR and additional mitigation measures recommended by this EIR. The River Corridor

SMA/SEA 23 is approximately 977 acres and includes approximately 332 acres of combined southern cottonwood-willow riparian forest and southern willow scrub. The River Corridor SMA/SEA 23 provides restoration and enhancement opportunities for riparian vegetation; and all riparian vegetation permanently removed from the proposed Landmark Village project would be replaced in kind at a minimum 1:1 ratio for Low Reach Value vegetation (*e.g.*, arrow weed scrub) to a 4:1 ratio for High Reach Value southern cottonwood-willow riparian forest (*e.g.*, see Mitigation Measure **4.4-29** and **Table 4.4-12** in **Subsection 4.4.10**, **Project Mitigation Measures**). Implementation of these mitigation measures would result in a net increase of wetland/riparian habitat and are expected to improve the overall value of the River corridor and associated aquatic, semi-aquatic, and riparian wildlife guilds. In addition, conservation measures include protection and enhancement of riparian and wetland habitat in the High Country SMA/SEA 20 and Salt Creek area, as well as Open Area, with associated wetland mitigation plans subject to the approval of the Corps and CDFG that ensure no net loss of similar functions and values/services (see Mitigation Measures **4.4-1, 4.4-15**, and **4.4-29** through **4.4-41** in **Subsection 4.4.10**, **Project Mitigation Measures**).

Land Use Classification and Present and Reasonably Foreseeable Projects. Similar to **Table 4.4-24** for vegetation communities and land covers, **Table 4.4-25** provides a breakdown of the estimated cumulative loss of wildlife habitat (by guild) that would result from (1) the proposed RMDP/SCP project and (2) present and reasonably foreseeable development as set forth in the "project lists" provided by the various land use jurisdictions within the SCRW.

Present and reasonably foreseeable projects, including the proposed RMDP/SCP project, with the exception of oak woodlands, would result in habitat losses ranging from approximately 980 acres for the Reptile and Amphibian – Semi-aquatic and Bird – Riparian guilds to approximately 38,000 acres for the Insect and Bat guilds. Based on the GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**) alone, there would be 0 acres of impacts to habitat for the Bird – Upland Woodland outside of the RMDP/SCP project boundaries. However, based on project-level mapping, there would be 95 acres of habitat loss for this guild in the RMDP/SCP project area. Because of the coarse scale of mapping, there are almost certainly oak woodlands on other present and reasonably foreseeable projects and, consequently, it is expected that there would be impacts to oak woodlands resulting from these projects. As discussed above, mitigation for loss of upland habitats such as coastal scrub, chaparral, and grassland due to present and reasonably foreseeable projects is uncertain. While CDFG and Corps "no net loss" policies for wetlands, and mitigation required for impacts to oaks by Los Angeles and Ventura counties, are intended to offset impacts to these resources, some net loss of function and value for wildlife, such as semi-aquatic amphibians and reptiles, could occur even if there is no net loss of acreage. Due to the likely permanent net loss of several tens of thousands acres of upland habitats (*e.g.*, coastal scrub, chaparral, and grassland)

and the potential loss of some functions and values/services of riparian, wetland, and oak woodland habitats for wildlife, the cumulative impact on wildlife guild habitats could be potentially significant.

The Proposed RMDP/SCP Project's Contribution to the Potential Cumulative Impact. The proposed RMDP/SCP project's contribution to this potential cumulative impact, broken down by wildlife guild, ranges from 95 acres for the Bird – Upland Woodland guild to 5,590 acres for the Insect and Bat guilds. By proportion, the proposed RMDP/SCP project's largest contribution to the potential cumulative impact on habitat is 1,070 acres of the total 1,120 acres for the Bird – Upland Grassland guild. Without accounting for mitigation, the proposed RMDP/SCP project's contribution to the potential cumulative impact on wildlife guilds could be cumulatively considerable. However, the mitigation measures recommended in this EIR, when added to those imposed by the Newhall Ranch Specific Plan Program EIR, render the proposed RMDP/SCP Project's contribution "less than cumulatively considerable," as that term is used in *State CEQA Guidelines* (California Code of Regulations, title 14, section 15130, subdivision (a)(3)). These mitigation measures include replacing the functions and values/services of riparian vegetation communities that may be lost through construction, as well as the dedication and maintenance of existing natural lands in the Open Area, River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, totaling approximately 9,753 acres. Mitigation also includes compliance with permits from federal and state agencies for impacts to wetlands and water quality (*i.e.*, NPDES and section 401 water quality certifications, section 404 individual permits, and section 1602, Streambed Alteration Agreements). These mitigation measures would reduce the impacts of the direct removal of wildlife habitats in the proposed RMDP/SCP project area. Thus, with the mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR, the proposed RMDP/SCP project area, including the Landmark Village project, would not result in a cumulatively considerable contribution to potential significant cumulative impacts to wildlife guilds in the SCRW.

Table 4.4-25
Summary of Cumulative Impacts to Wildlife Guilds in the Santa Clara River Watershed (GAP Data are Approximate)[1]

Wildlife Guild	Habitat Relationships[2]	Total Acres of Habitat in Watershed	Permanent Direct and Indirect Impact Acres of Proposed RMDP/SCP Project	Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including Proposed RMDP/SCP Project)	Estimated Cumulative Impact Acres in Watershed Including Proposed RMDP/SCP Project Plus Present and Reasonably Foreseeable Projects
Insect Guild; Bat Guild; and Overall General Impacts	Coastal scrub Chaparral California annual grassland Riparian Oak and walnut woodland Agriculture Disturbed	836,000	5,590	32,300	37,890
Reptile–Low Mobility Guild Mammal–Low Mobility	Coastal scrub Chaparral California annual grassland	747,000	3,050	31,000	34,050
Reptile and Amphibian – Semi-Aquatic Guild Bird-Riparian	Riparian	25,000	230	800	1030
Bird-Upland Scrub and Chaparral	Coastal scrub Chaparral	725,000	1,980	31,000	32,890
Bird-Upland Grassland	Non-native grassland	22,000	1,070	50	1,120
Bird-Upland Woodland	Oak woodland	5,170	95	0	95
Mammal-High Mobility	Coastal scrub Chaparral Riparian Oak woodland	755,000	2,300	32,000	34,300

[1] *Acreages were not quantified for the Aquatic Mollusk guild because impacts are site-specific; for the Fish guild because the distribution of the species in the guild is limited to the Santa Clara River; and for the Bird -- Raptor and Mammal -- Moderate Mobility guilds because habitat used by the species in these guilds is too diverse to generate a broad, watershed-scale estimate.*

[2] *Acreages based on California GAP Vegetation Communities (UCSB, 1999, Recirculated Draft EIR, **Appendix 4.4**) for areas outside of the RMDP/SCP project boundaries and on the project-level data for areas within the SCP project area boundaries. Acreages are based on the totals reported in **Table 4.4-24** and are rounded to nearest 1,000 acres for totals greater than 20,000 acres at watershed level and to nearest 10 acres for project-level impacts.*

(4) Impacts to Wildlife Habitat Linkages, Wildlife Corridors, and Wildlife Crossings

In this subsection, the EIR evaluates, on a guild-by-guild basis, the proposed RMDP/SCP project's contribution to potential cumulative impacts on wildlife habitat linkages, wildlife corridors, and wildlife crossings. Note that the analysis primarily focuses on watershed-level habitat linkages rather than on a project-level movement corridors and connectivity. Because project-level data are not available for project-specific movement corridors and crossings, analysis of these data would be speculative. However, it can be assumed that other projects with broad impacts over a landscape would be expected to constrain wildlife use and distribution on site, and have a potential to block movement through certain areas, including through established wildlife corridors and crossings.

As described in **Subsection 4.4.9.b.1.e, Wildlife Habitat Linkages**, landscape habitat linkages in the SCRW consist of relatively large open space areas that (1) contain natural habitat and (2) provide connection between at least two larger adjacent open spaces that can provide for both diffusion and dispersal of many species. Linkages can form contiguous tracts of habitat when adjacent to other open space areas. Large open space networks can be formed in this way to connect and conserve habitat throughout entire regions (Bennett 2003).

Figure 4.4-8 shows the conceptual regional open space connectivity identified by Penrod *et al.* (2006, Recirculated Draft EIR**, Appendix 4.4**) that would provide for landscape-scale habitat connectivity between the Santa Susana Mountains to the south and the Los Padres National Forest to the north. These conceptual linkages encompass the High Country SMA and the Salt Creek area within the proposed RMDP/SCP project area and the Santa Clara River west of the proposed RMDP/SCP project area. Penrod *et al.* (2006, Recirculated Draft EIR**, Appendix 4.4**) developed this connectivity concept using a "least cost analysis." According to Penrod *et al.* (2006, Recirculated Draft EIR**, Appendix 4.4**), the High Country SMA/SEA 20 and Salt Creek area, along with regional open space conservation areas and the limitations on development imposed by initiatives such as "SOAR,"[24] constitute important components of a regional linkage design—one that would connect the Santa Monica Mountains, the San Gabriel Mountains, and the Sierra Madre Mountains.

The High Country SMA/SEA 20 and Salt Creek area within the proposed RMDP/SCP project area provide a key component of the east-west linkage that crosses Interstate 5 and connects to the Angeles National Forest in the San Gabriel Mountains to the east and to Ventura County SOAR open space to the southwest. They also provide a key component of the north-south linkage between the Santa Susana

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24 Save Open-Space and Agricultural Resources (SOAR) initiative passed by Ventura County voters in 1998 that amended the County's General Plan to limit development on agricultural, open space, and rural lands within Ventura County. See Ventura County General Plan, GOALS, POLICIES & PROGRAMS, (2008, pp. 6–8).

Mountains and the "Fillmore Greenbelt" to the northwest that further links to the Los Padres National Forest and the Angeles National Forest to the north. Most of the upland wildlife species probably use the High Country SMA/SEA 20 and Salt Creek area extensively.

North-south movement between the Santa Susana Mountains and the "Fillmore Greenbelt" requires wildlife to cross SR-126. **Figure 4.4-21** shows the three existing crossings in Ventura County west of the proposed RMDP/SCP project area (including the Landmark Village project site) that can be accessed by wildlife moving along the Santa Clara River. These crossings, which would not be affected by the proposed RMDP/SCP project, are arched culverts large enough for vehicles to pass through and are large enough to convey wildlife. These crossings measure about 4.4 meters (14 feet 7 inches) in height, 7.5 meters (25 feet) in width, and 51.8 meters (170 feet) in length, resulting in an openness factor of 0.65, which well exceeds the openness factor of 0.25 found by Donaldson (2005) to be adequate for white-tailed deer. The easternmost of these crossings would serve wildlife movement within and through the proposed RMDP/SCP project area *via* the Salt Creek corridors, as well as Tapo Canyon in Ventura County.

The Landmark Village project site includes a potential north-south local wildlife corridors that connect to the Santa Clara River, Chiquito Canyon north of the Santa Clara River. Under current conditions, the function of this potential wildlife corridor to convey north-south wildlife movment and access to and from the Santa Clara River is limited because the Landmark Village tract map area is currently used for agriculture and frequently devoid of vegetative cover. Coyotes may use this potential wildlife corridor, but species typically requiring cover, such as bobcat and mule deer, as well as less mobile species that require "live-in" habitat, are not as likely to use this potential corridor under existing conditions.

In addition to the High County SMA/SEA 20 and Salt Creek area, the Santa Clara River corridor, including the reach through the Landmark Village project site, is a regionally important riparian and wetland resource, in part due to its role as a functioning wildlife corridor and habitat linkage for east-west wildlife movement. The River Corridor SMA/SEA 23 (*i.e.*, those portions of the River corridor that lie within the proposed RMDP/SCP project area) would be approximately 1,000 to 2,000 feet wide and would remain sufficiently wide after development to accommodate flood events while maintaining the existing mosaic of habitat types currently present along the river (PACE 2008, Recirculated Draft EIR, Appendix 4.4). Specifically within the Landmark Village project site, the River would be maintained as

open space with a minimum width of about 1,000 feet. The RMDP (Dudek 2008)[25] provides for minimum 100-foot-wide "transition" areas between the River Corridor SMA/SEA 23 and development, restricts recreational uses of the River Corridor SMA/SEA 23, and provides for long-term management to ensure that it continues to function as a habitat linkage and movement corridor. With the transition zones along the River, the overall width of natural habitat will be a minimum of approximately 1,200 feet wide. The River corridor will therefore maintain sufficient dimensions to convey a variety of larger, mobile wildlife species, such as mule deer, coyote, gray fox, bobcat, and mountain lion, as well as allow for dispersal of many smaller and less mobile species, including birds, small mammals, reptiles, and amphibians that live in the River Corridor. The Long Canyon Road bridge will somewhat constrict the Santa Clara River and corridor but for a rather short distance, about 100 feet, with an adequate height of 11 to 22 feet to allow for unconstrained movement of wildlife beneath the bridge. This is discussed in the RDEIR, Section 9. Project Impacts, b. Impact Analysis, 1) Direct Impacts, e) Wildlife Habitat Linkages.

The Castaic/Hasley corridor (**Figure 4.4-22**) would also remain intact as Open Space/Open Area following implementation of the RMDP/SCP and buildout of the Specific Plan, VCC, and Entrada planning areas, including the Landmark Village project. This corridor would allow for movement of many mammal — High Mobility species (*e.g.*, coyote, mule deer, and possibly mountain lion and bobcat), and would function as live-in habitat and movement habitat for the other species guilds. The Castaic/Hasley corridor would continue to have connectivity value between the Santa Clara River and upland habitats to the northeast of the proposed RMDP/SCP project area extending to Castaic Lake and the Angeles National Forest.

Other existing habitat areas currently function as linkage habitat in the undeveloped landscape and may be used by wildlife for movement between the Santa Susana Mountains to the south and the Los Padres National Forest to the north. Some of these linkages would be somewhat constrained by buildout of the Specific Plan area, including Potrero Canyon and Long Canyon south of the River corridor and Chiquito Canyon and San Martinez Grande Canyon north of the River (**Figure 4.4-22**). As noted above, Chiquito Canyon is associated with the Landmark Village site, but is currently limited in its function as a wildlife movement corridor because the site is used for agriculture.

The consideration of potential cumulative impacts to wildlife landscape habitat linkages falls under the following significance criteria as previously identified in **Subsection 4.4.9.a**: whether the proposed Project

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25 The RMDP is incorporated by reference, as permitted in section 15150 of the *State CEQA Guidelines*. All referenced documents are available for public inspection and review upon request to: County of Los Angeles, Department of Regional Planning, 320 West Temple Street Los Angeles, California 90012 (Samuel Dea; (213) 974-6461) or Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012 (Susan Tebo; (805) 437-1900). Additionally, this document can also be obtained from the California Department of Fish and Game's Web site at http://www.dfg.ca.gov/regions/5/newhall/docs/.

and present and reasonably foreseeable development would interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors.

As discussed above, the Santa Clara River is an important regional habitat linkage in the SCRW. The combined High Country SMA/SEA 20 and Salt Creek area provide the most direct connections between the River corridor habitat and large upland habitat areas south of the River, and are those identified by Penrod *et al.* (2006, Recirculated Draft EIR**, Appendix 4.4**) as important components of regional habitat connectivity. Notwithstanding the preservation of these key areas, the loss of approximately 5,590 acres associated with the proposed RMDP/SCP project, including 1,063 acres associated with the Landmark Village project, and the approximately 32,300 acres of impacts from present and reasonably foreseeable projects would continue to reduce both the size and availability of linkages and corridors in the SCRW. This is particularly true for areas adjacent to the Santa Clara River where both agricultural practices and the development of commercial and residential developments have focused.

Open space, public land, and wildlife compatible uses within the SCRW include National Forest Service lands (both the Los Padres and Angeles National Forests), other designated public ownerships (*e.g.*, BLM, State Parks), utility corridors, agricultural and pasture lands, and undeveloped private areas. The SCRW also includes commercial, industrial, and residential development. Water infrastructure including dams associated with Bouquet, Piru, and Castaic Creeks and diversion structures such as the Freeman diversion dam on the Santa Clara River are also present. The rapid expansion of population centers and urban growth in this region (particularly the Santa Clara Valley) has resulted in the continued loss of undeveloped lands, and the degradation of riparian and upland habitats that support populations of unique or rare species. Natural and wilderness areas in the SCRW, particularly near the Santa Clara River, are gradually being displaced by development, and wildlife movement corridors in the region have been modified to the extant that the movement of wildlife is curtailed or limited in some areas (Penrod *et al.* 2006, Recirculated Draft EIR**, Appendix 4.4**), and expanding urban population centers are degrading the habitat values in urban/wilderness edge areas.

Los Padres
National Forest

Fillmore
Greenbelt

LOS ANGELES COUNTY
VENTURA COUNTY

126

5

Salt Creek Corridor

Ventura County
S.O.A.R. Open Area

Santa Susana Mountains Corridor

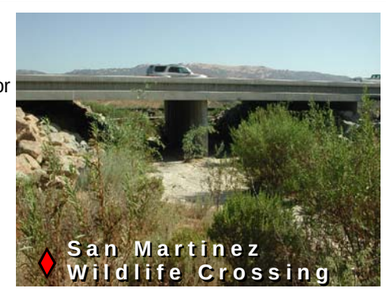
Legend

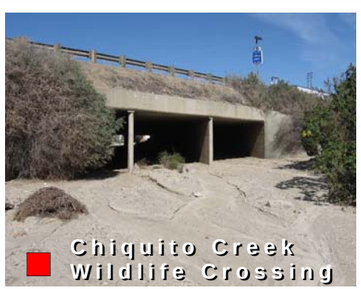
- RMDP Boundary
- SCP Boundary
- County Boundary
- Salt Creek Watershed
- Castaic Creek
- Chiquito Canyon
- San Martinez
- Ventura County
- Wildlife Corridor
- River Corridor

N

0 0.5 1 2 Miles

APPROXIMATE SCALE IN MILES





AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-21

Landmark Village EIR

Wildlife Connectivity Crossings

DUDEK

Legend

RMDP Boundary

SCP Boundary

Regional Habitat Linkages

1 - Santa Clara River Corridor
2 - Salt Creek Confluence
3 - Salt Creek High Country
4 - East Fork Salt Creek
5 - Potrero Canyon Salt Creek
6 - Potrero Canyon
7 - Long Canyon
8a - Humble Canyon
8b - Lion Canyon
8c - Exxon Canyon
8d - Dead End Canyon
8e - Middle Canyon
8f - Magic Mountain Canyon
9 - Chiquito Canyon
10 - San Martinez Grande Canyon
11 - Off-Haul Canyon
12 - Homestead Canyon
13- Castaic/Hasley Corridor

Impacts

Direct Permanent

Indirect Permanent

Slope

Less than 25 Percent Slope

25 Percent Slope or Greater

0 0.25 0.5 1 Miles

APPROXIMATE SCALE IN MILES

IMAGE SOURCE: USGS 24K Quad

FIGURE 4.4-22

Landmark Village EIR

DUDEK

Alternative 2 Impacts to RMDP/SCP Regional Wildlife Connectivity Corridors

As indicated in **Table 4.4-24**, the SCRW consists of approximately 1,038,100 acres of land and supports a variety of vegetation communities and land covers. According to the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), approximately 47,300 acres of the watershed had been developed as of 1998. In addition, project list information for the watershed within Ventura and Los Angeles counties indicates that another 37,890 acres are expected to be developed in the foreseeable future, based on past, present, and reasonably foreseeable projects, including the proposed RMDP/SCP project (which includes the Landmark Village project), resulting in a total of approximately 85,200 acres of watershed being developed.

Figure 4.4-18 shows that most of the approximately 99,000 acres of land converted to development land uses in the SCRW (*i.e.*, agriculture, and residential, commercial, industrial, infrastructure development) has occurred (1) in the southern portion of the watershed along the Santa Clara River, where agricultural uses dominate and (2) in the cities of Ventura, Santa Paula, Santa Clarita, and the communities of Valencia and Acton, where urban development dominates. In the these portions of the SCRW, urbanization has resulted in alterations to the natural landscape and the fragmentation of natural vegetation communities, isolation of wildlife habitat, and the creation of discontinuous movement corridors. This is demonstrated in portions of the Santa Clara River Valley where development along the Interstate 5 corridor has narrowed the existing landscape features and now inhibits movement along much of the Valley floor. However, a large amount of relatively unobstructed and natural land still exists within this region, including large contiguous areas within the Angeles and the Los Padres National Forests and within private lands including the Forest Service lands. Development within Forest Service lands in this area is primarily limited to small residential communities on private in holdings or recreational cabins, OHV use, reservoirs and aqueducts, ranger stations, recreational areas and campgrounds, utility corridors, access roads, hiking trails, and fuel breaks.

Without accounting for past, present, or reasonably foreseeable mitigation, there could be constraints on the use of habitat linkages, wildlife corridors, and wildlife crossings in developing regions of the SCRW by present and reasonably foreseeable projects, including the proposed RMDP/SCP project (which includes the Landmark Village project with respect to north-south movement along Chiquito Canyon and east-west movement along the Santa Clara River). The proposed RMDP/SCP project would constrain the use of some regional landscape-level linkages, local wildlife corridors (*i.e.*, within the RMDP/SCP project development area), and wildlife crossings within the developed portions of the proposed RMDP/SCP project area and large areas of habitat loss would occur. The contribution of Landmark Village project's impacts to local and regional wildlife movement would be less than significant (see **Subsection 4.4.9.b.1.e**). As noted above, Chiquito Canyon is a potential local north-south wildlife movement corridor providing access to and from the River Corridor, but due to existing agricultural uses within the tract map, its function under existing conditions is limited. Constraints on this corridor with implementation

of the proposed project would not significantly affect existing use of regional movement corridors. The Santa Clara River corridor will maintain its function for east-west regional wildlife movement and connects directly to Castaic Creek, which provides for north-south wildlife movement. The open space in River corridor within the Landmark Village project site will be a minimum of 1,000 feet wide, and with the minimum 100-foot transition areas between development and the River corridor, the minimum functional width of the corridor will be about 1,200 feet. As noted above, the Long Canyon Road bridge will somewhat constrict the Santa Clara River and corridor but for a rather short distance, about 100 feet, with an adequate height of 11 to 22 feet to allow for unconstrained movement of wildlife beneath the bridge.

Although impacts to wildlife movement are less than signiifcant, a variety of mitigation measures are recommended by Newhall Ranch Specific Plan EIR and this EIR that would further reduce impacts to wildlife corridors, including dedication of the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, controls on public access to dedicated open space areas, controls on lighting at the urban-open space interface, controls on pet, stray, and feral cats and dogs, and homeowner education about sensitive biological resources.

While much of the SCRW likely would remain undeveloped or designated as public lands, including the National Forests, urbanization of the Santa Clara River corridor as a whole is where most development is expected to occur in the future. This would result in the expansion of barriers to wildlife movement in and around the River Valley. However, based on existing information for present and reasonably foreseeable projects and the proposed RMDP/SCP project, which are the scope of this cumulative analysis, movement through the Santa Clarita Valley would be maintained between both National Forests and private lands such as the Simi Hills, as shown in **Figure 4.4-8**, South Coast Wildlands Open Space Connectivity and Linkage, and **Figure 4.4-22**, Alternative 2 Impacts to RMDP/SCP Regional Wildlife Connectivity Corridors. It was concluded in the Newhall Ranch Specific Plan that combined High Country SMA/SEA 20 and Salt Creek area provide the most direct connections between the River corridor habitat and large upland habitat areas south of the River, and that these habitat linkages would remain intact and functional after implementation of buildout of the RMDP/SCP project area, including the Landmark Village project, under Alternative 2. It was for these reasons that at the project level, it was determined that impacts to landscape habitat linkages would be adverse, but not significant. It follows, therefore, that if regional wildlife movement *via* the large habitat linkages identified by Penrod *et al*. (2006, Recirculated Draft EIR**, Appendix 4.4**), including the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, are maintained on site, the contribution of the proposed RMDP/SCP project (which includes the Landmark Village project area) to constraints on regional wildlife movement in the SCRW would not be cumulatively considerable. Thus, with the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended by this EIR, the proposed Landmark Village project

would not result in a cumulatively considerable contribution to potential significant cumulative impacts to regional wildlife habitat landscape linkages and local wildlife movement corridors in the SCRW.

(5) Impacts to Special-Status Species

The cumulative impact analysis for special-status species also uses the "project list" approach for the watershed. This analysis is organized into five separate special-status categories:

- State and/or Federally Listed and California Fully Protected Wildlife Species
- California Species of Special Concern (CSC)
- California Special Animals, California Watch List Species, Specially Protected Mammals, and CDFG Trust Resource Species
- State and/or Federally Listed Plant Species
- California Native Plant Society (CNPS) and Locally Regulated Plant Species

The listed and California Fully Protected Species are analyzed in the greatest detail because they have the greatest sensitivity and generally would be expected to be most affected by cumulative impacts. For each species, the habitat relationships were analyzed in the same manner as the vegetation communities and land covers described above in **Subsection 4.4.11.c.1**. Except where noted, the combined California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**) and project-level data were used for the cumulative impact analyses because the analysis is within the context of the entire watershed.

Because of the numerous wildlife species in the two categories: (1) California Species of Special Concern (CSC); and (2) Special Animals, Watch List, Specially Protected Mammals, and Trust Resources, the analyses for the two categories are generalized to the guild level (*e.g.*, Bird – Raptor, Reptile and Amphibian – Semi-aquatic, *etc*.). The detail of the analysis is scaled to the sensitivity of the species group. For example, CSC Bird – Riparian species are analyzed in more detail than Special Animal Bird – Riparian. Where the detailed analyses for the Listed and California Fully Protected Species are applicable to species in the lower sensitivity categories (*e.g.*, least Bell's vireo analysis to the CSC Bird – Riparian guild), cumulative impacts are incorporated and summarized.

(a) Listed and California Fully Protected Wildlife Species

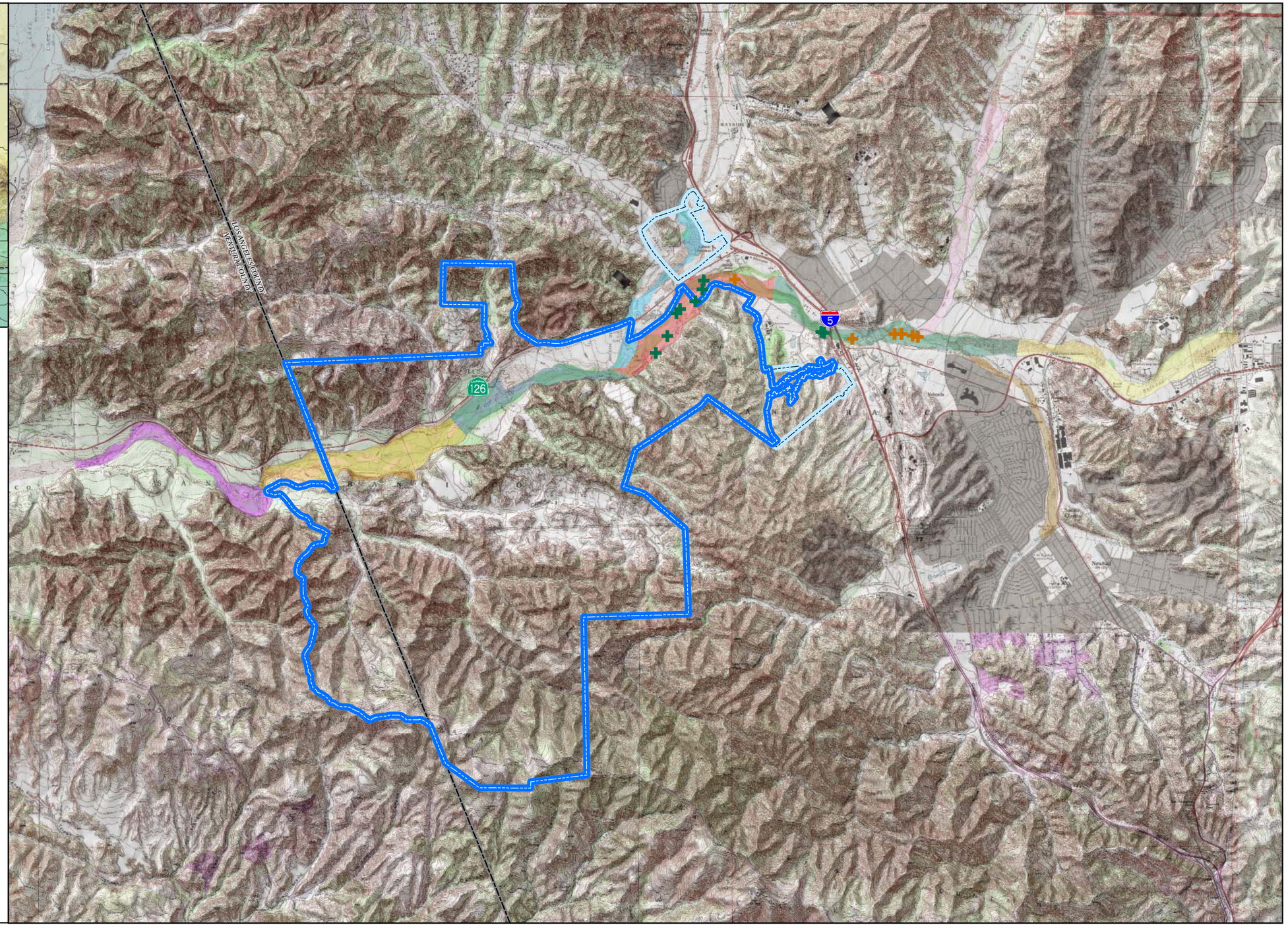
This section addresses cumulative impacts the following federally and state-listed and/or California Fully Protected Species:

- arroyo toad (FE)
- American peregrine falcon (CE, CFP)
- California condor (FE, CE, CFP)

- coastal California gnatcatcher (FT)
- California red-legged frog (FT)
- golden eagle (CFP)
- least Bell's vireo (FE, CE)
- ringtail cat (CFP)
- southern steelhead (FE)
- southwestern willow flycatcher (FE, CE)
- unarmored threespine stickleback (FE, CE, CFP)
- western yellow-billed cuckoo (CE)
- white-tailed kite (CFP)

The cumulative impact analysis of listed and California Fully Protected Species is summarized below. See **Subsection 4.4.9.b.1.h** for the full detail of impacts and mitigation measures as they relate to each of the species and to **Subsection 4.4.10**, Project Mitigation Measures, for full descriptions of all mitigation measures.

Arroyo Toad (FE). As described in the species account in **Subsection 4.4.9.b.1.h**, the arroyo toad (tadpoles only) occurrences documented in the proposed RMDP/SCP project area are in the Santa Clara River upstream and downstream of the proposed Commerce Center Drive Bridge site and near the Valencia Water Treatment Plant (**Figure 4.4-23, RMDP/SCP Arroyo Toad Species Occurrences**). Other documented occurrences of arroyo toad in the upper SCRW (but outside the proposed RMDP/SCP project area boundaries) include the Santa Clara River just east of I-5; Castaic Creek, including above the reservoir (Castaic Lake); Upper San Francisquito Creek; the Santa Clara River adjacent to Castaic Junction; the Santa Clara River near the confluence of San Francisquito Creek; and the Soledad Canyon area. The arroyo toad also occurs elsewhere in the SCRW, in Sespe Creek and Piru Creek. The Sespe Creek population is in the Los Padres National Forest, primarily within the Sespe Wilderness, and is one of the largest populations in the Los Padres National Forest, with thousands of juveniles observed during years of successful reproduction (70 FR 19584). The Piru Creek population occurs both upstream and downstream of the Pyramid Reservoir in the Los Padres National Forest (70 FR 19584). The upper Piru Creek population has been expanding, likely in part due to seasonal campground closures and the elimination of suction-dredge mining (70 FR 19584). The lower Piru Creek population below Pyramid Reservoir has experienced habitat degradation due to perennial water releases, excessive flows, and invasive predators, but future releases are intended to mimic natural flows and this should benefit the arroyo toad (70 FR 19584).



Legend

- RMDP Boundary
- SCP Boundary
- County Boundary
- Arroyo Toad
- Arroyo Toad Tadpole
- I-5 Freeway Urban
- Las Brisas
- Castaic Creek
- County Line
- East of Castaic Creek
- River Village
- San Fransisquito Creek
- South Fork
- West of Castaic Creek

0 0.25 0.5 1 Miles

APPROXIMATE SCALE IN MILES

IMAGE SOURCE: USGS 24K Quad

FIGURE 4.4-23

Landmark Village EIR

DUDEK

RMDP/SCP Arroyo Toad Species Occurrences

In 2005, USFWS designated 11,695 acres of critical habitat for arroyo toad (substantially downsizing the 95,655 acres proposed in February 2004), and excluded the proposed Unit 6 (which contained portions of the proposed RMDP/SCP project site) along with portions of many Southern California counties for economic reasons (70 FR 19562-19633). In 1999, USFWS published the Arroyo Southwestern Toad Recovery Plan (USFWS 1999), but the Santa Clara River was not specifically identified in the Recovery Plan as having a conservation role in the recovery strategy for the species. In the Santa Clara River watershed, six federal biological opinions were issued for the arroyo toad between 1993 and 2006 (**Table 4.4-20**), including one for the Natural River Management Plan upstream of the proposed RMDP/SCP project.

For the arroyo toad, the California GAP data are not refined enough to portray suitable arroyo toad habitat. Implementation of the RMDP and buildout of the Specific Plan, VCC, and Entrada planning areas would result in the permanent loss of 59 acres (7.4 percent) of modeled Category 1 habitat on the proposed RMDP/SCP project site, defined as habitat containing all the primary constituent elements used to designate critical habitat for the species (70 FR 19562). However, 25 acres (32.6 percent) of Category 2 habitat (habitat containing most of the primary constituent elements) and 705 acres (66.6 percent) of Category 3 habitat (primarily uplands adjacent to the Santa Clara River corridor that could be used for aestivation and hibernation, but which lack hydrology to support breeding) would also be permanently lost. Without accounting for past, present, or reasonably foreseeable mitigation, impacts to arroyo toad habitat in the SCRW resulting from present and reasonably foreseeable projects, including the proposed RMDP/SCP project, could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, in close proximity to occupied arroyo toad habitat also could result in long-term secondary effects, including disruption of nocturnal activities and greater vulnerability to predation by nocturnal predators (such as owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators (see Crooks and Soulé 1999); collecting by children; degradation of habitat from increased human use (*e.g.*, trampling, trash, and off-road vehicles) and altered fire regimes (likely too frequent fire); invasion by exotic plant (*e.g.*, giant reed, tamarisk, and pampas grass) and wildlife species (*e.g.*, Argentine ants, bullfrogs, African clawed frogs, exotic fish, and crayfish); use of pesticides; and increased risk of roadkill on roads adjacent to occupied areas. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and this EIR to offset project-level significant impacts to arroyo toad habitat would result in a large, managed open space system (see **Subsection 4.4.10, Project Mitigation Measures**). This open space system would also reduce long-term secondary impacts on arroyo toad habitat. These mitigation measures include preservation, restoration, and enhancement of riparian and wetland habitat, controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (*i.e.*, NPDES and section 401 permits), and lighting controls. Large areas of suitable habitat for this species would be protected in the River Corridor SMA/SEA 23. The Floodplain Hydraulics Impacts Assessment (PACE 2008**,** Recirculated Draft EIR**, Appendix 4.4**) found that there would be no significant impacts in water flows, velocities, depth, sedimentation, or floodplain and channel conditions downstream of the proposed RMDP/SCP project area over the long term as a result of the proposed RMDP/SCP project improvements. These hydrologic effects were also found to be insufficient to alter the amount, location, and nature of aquatic and riparian habitats within the proposed RMDP/SCP project area and downstream into Ventura County. The technical analysis further determined that the River would retain sufficient width to allow natural fluvial processes to continue. Following buildout, the River Corridor floodplain would remain 1,000 to 2,000 feet wide and retain the mosaic of habitats, including the relatively narrow wetted channel, benches, and dry terraces that support various special-status species and meet their life history needs. These habitats and the populations of the species within and immediately adjacent to the River Corridor would not be substantially affected. A total of 738 acres (92.6 percent) of existing Category 1 habitat for the arroyo toad on the proposed RMDP/SCP project site would be maintained within the River Corridor SMA/SEA 23.

A variety of specific mitigation measures also would be implemented by the proposed Landmark Village project to avoid and reduce potential long-term secondary impacts to arroyo toad. Measures would be implemented to control human activities in the River Corridor SMA/SEA 23, including homeowner education and restrictions on recreational activities. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting along the open space-urban interface would be downcast. Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats in the open space system would be monitored and controlled to extent feasible. Implementation of these measures would allow this species to persist on site after development in the River Corridor SMA/SEA 23.

The vast majority of existing Category 1 habitat (92.6 percent) for the arroyo toad on the proposed RMDP/SCP project site would be protected and managed in the River Corridor SMA/SEA 23 and lands outside the 100-year floodplain would be conserved. This preservation and management would also reduce potential long-term secondary impacts to a level that is adverse but not significant. The arroyo toad has not been documented to breed on the Landmark Village site, as indicated by no observations of

adult toads during focused surveys. The flow regime from the wastewater treatment plant upstream of the RMDP/SCP project site fluctuates daily and does not support hydrologic regimes consistent with breeding habitat (*i.e.*, semi-permanent breeding pools). It is not expected that there would be a loss of an extant breeding population and no substantial loss of Category 1 habitat for this species on site. The largest populations in the SCRW occur in the Los Padres National Forest in Sespe and Piru creeks. These populations are not at risk from urban development and, with proper management, they are expected to expand in the future.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

American Peregrine Falcon (CE, CFP). The American peregrine falcon occurs occasionally in the proposed RMDP/SCP project area. One American peregrine falcon was observed hunting along the Santa Clara River corridor near the Grapevine Mesa area within the Newhall Ranch Specific Plan area by Guthrie in July 2000 (Guthrie 2000), and an adult male was observed hunting over the Wolcott agricultural field by Bloom Biological, Inc. in late December 2007 (Bloom Biological 2008). No other occurrences of this species have been documented on site during annual bird surveys between 1988 and 2008. American peregrine falcons have never been documented nesting in the proposed RMDP/SCP project area. This species is sensitive to human disturbance and usually nests in areas that are remote from human activities, such as cliffs, although tall buildings, bridges, or other tall man-made structures are also suitable for nesting if they are protected from human disturbance. Such features that would be suitable for nesting by the peregrine falcon are absent in the RMDP/SCP project area; therefore, it is not expected to nest on site.

The California breeding range for the American peregrine falcon has been expanding and now includes the Channel Islands, the coast of southern and northern California, inland north coastal mountains, the Klamath Mountains, Cascade Range and the Sierra Nevada (CDFG 2005). In California, the American peregrine falcon is an uncommon breeder or winter migrant throughout much of the state. It is absent from desert areas (Zeiner *et al.* 1990A). Active nests have been documented along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. As a transient species, the American peregrine falcon may occur almost anywhere that suitable habitat is present (Garrett and Dunn 1981). One pair occurs within the Angeles National Forest (Stephenson and Calcarone 1999), and one occurs on the Vincent Thomas Bridge at the Port of Los Angeles in Los Angeles County. Wintering migrants can be seen inland throughout the Central Valley, in the western Sierra Nevada, along the coast, and occasionally on the Channel Islands (Zeiner *et al.* 1990A). As a transient species, the American

peregrine falcon may occur almost anywhere that suitable habitat and prey are present (Garrett and Dunn 1981).

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 103,000 acres of potentially suitable foraging habitat for the peregrine falcon within the SCRW (riparian, California annual grassland, agriculture, and disturbed land). However, this species is not expected to forage in all 103,000 acres in the SCRW. Foraging sites are often located near rivers or lakes, as well as in coastal and inland wetlands (AOU 1998; Brown 1999; Snyder 1991). It is expected that foraging by this species in the SCRW would be concentrated along the Santa Clara River and adjacent upland habitats and agricultural areas. Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 4,815 acres of 103,000 acres of foraging habitat. Without accounting for past, present, or reasonably foreseeable mitigation, this could be a potential significant cumulative impact because several thousand acres of potential foraging habitat would be permanently lost and loss of habitat along the Santa Clara River would also affect the abundance and distribution of important prey such as waterfowl. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 3,515 acres, which could be cumulatively considerable, absent mitigation.

However, the American peregrine falcon only uses the proposed RMDP/SCP project area for occasional foraging, but has not been observed nor is it expected to nest on site. Further, despite existing and anticipated projects in the watershed, approximately 98,000 acres of potentially suitable foraging habitat would remain in the SCRW, although most of its foraging in the watershed is expected to be concentrated within and adjacent to the Santa Clara River floodplain.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP, including the Landmark Village project, also could result in potential significant cumulative secondary effects due to increased human activity in developed areas and adjacent open space which could disrupt foraging activities, and use of pesticides which could cause poisoning. At the watershed level these secondary effects could be a potential significant cumulative effect. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and this EIR to offset project-level significant impacts to American peregrine falcon foraging habitat would result in a large, managed open space system (see **Subsection 4.4.10, Project Mitigation Measures**). These mitigation measures include habitat preservation, restoration, enhancement, and management of the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area—areas that would form a large,

contiguous open space system totaling approximately 6,300 acres comprised of riparian and upland habitats that provide foraging habitat for American peregrine falcon. This set-aside also would reduce potential long-term secondary effects, such as increased human activity, because birds would have substantial alternative habitat in which to forage. Potential secondary poisoning from pesticides would be controlled through an integrated pest management (IPM) plan.

In addition to these mitigation measures which would reduce impacts at the project level, this species is only an occasional visitor and only documented as foraging on the RMDP/SCP project site. This species is known to forage throughout the suitable habitat within the watershed and California. Its nesting is usually limited to areas with limited human disturbance. American peregrine falcon is known to forage within National Forest system lands within the watershed in association with rivers and lakes.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

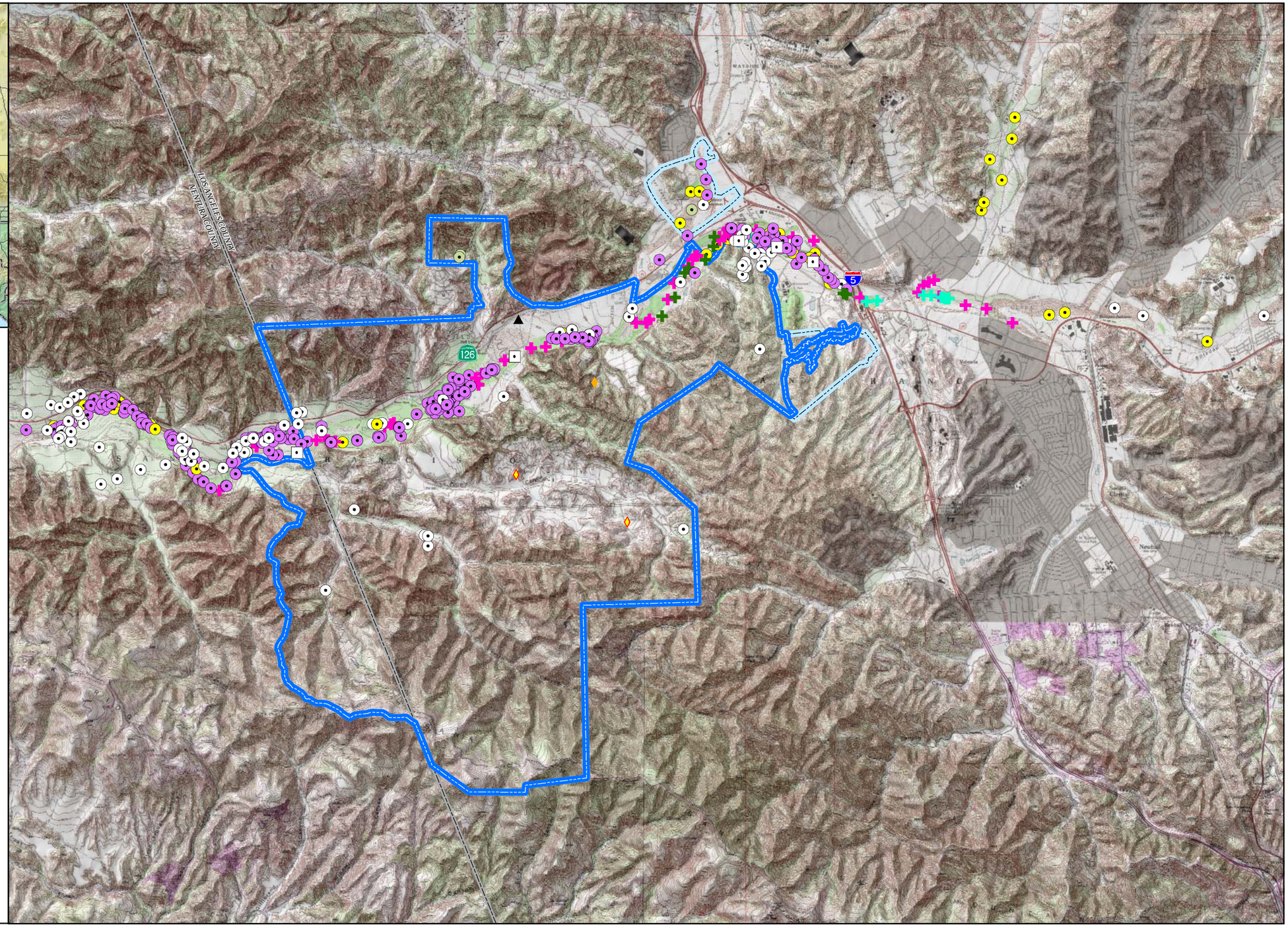
California Condor (FE, CE, CFP). California condor populations exist in Arizona, southern California, Utah, and northern Baja California (CDFG 2005). California condors are known to exist and nest in the Sespe Condor Sanctuary within the SCRW approximately 30 miles northwest of the proposed RMDP/SCP project area. This species is extremely mobile, and because of the extensive foraging range of this species, California condors could include the proposed RMDP/SCP project area, including the Landmark Village project area, within the potential foraging range of the Sespe population. Surveys for the California condor were included as part of other raptor and avian species surveys that were conducted along the Santa Clara River and throughout upland areas of the RMDP/SCP project area (Bloom Biological 2007, 2008). While California condor foraging flights have been known to take individuals over the Santa Clarita Valley, these flights are generally at high altitudes. Until April 2008, California condors had not been known to nest or land within the RMDP/SCP project area within the last 25 years (Bloom Biological 2007, 2008). In April 2008, a California condor was observed feeding on a dead calf in a Potrero side canyon by wildlife biologist Chris Niemela (Carpenter 2008) (**Figure 4.4-24, RMDP/SCP – Listed and California Fully Protected Wildlife Species Occurrences**). The USFWS also provided information to Bloom that California condors fitted with GPS transmitters had landed on Newhall Ranch on several days from April through July 2008 (Root 2008). In January 2009, up to five California condors were detected feeding on a dead calf in the middle section of Potrero Canyon south of Potrero Mesa between January 27 and 30 (Niemela 2009). A follow-up visit by Chris Niemela was conducted at the request of the USFWS to photodocument the calf carcass and site where the feeding occurred.

Critical habitat for the California condor was designated by the USFWS on September 22, 1977 (42 FR

47840-47845), however, no critical habitat was designated on the proposed RMDP/SCP project site, which includes the Landmark Village project site. The nearest critical habitat area is the Sespe-Piru Condor Area, six to seven miles north of the proposed RMDP/SCP project site. The California Condor Recovery Plan was published by the USFWS on February 26, 1980 (USFWS 1980); however, no recovery activities were identified for the proposed RMDP/SCP project site or nearby vicinity.

The California condor requires habitat that contains an adequate food supply (carrion), open space areas, and reliable winds and air movement to allow for long-duration soaring during foraging. Nest habitat typically includes cliff faces and, occasionally, large tree snags with cavities. Condors are not expected to nest in the RMDP/SCP project area due to the general lack of adequate nesting habitat and likely only opportunistically forage in the RMDP/SCP project area, as well as in other present and foreseeable future projects analyzed here for cumulative impacts. In general, these areas probably do not support large populations of large mammals (*e.g.*, mule deer) across the broad landscape area or suitable nesting sites. For these reasons, the proposed RMDP/SCP project, including Landmark Village, in combination with other present and foreseeable future projects, is not expected to result in a potential significant cumulative impact to this species due to the loss of foraging habitat.

The risk of direct injury or mortality of individual California condors due to construction activities associated with present and reasonably foreseeable projects, including the proposed RMDP/SCP project, is low. However, construction debris, litter, leaking equipment, or road kill can attract this species to construction sites. This could subject condors to strikes by construction vehicles. Condors are curious birds and have been documented in close association with oil pumps and human activity on the Los Padres National Forest. During cleanup activities at trash sites, for example, condors have been observed sitting on guard rails adjacent to the cleanup activities. If individuals were injured or killed during construction activities, this could be a potential significant cumulative impact because the loss of any individuals of this species likely would reduce its chance for long-term survival in the wildlife. The contribution of the proposed RMDP/SCP project, including the Landmark Village project, to this potential significant cumulative impact could be cumulatively considerable, absent mitigation.



Legend

- RMDP Boundary
- SCP Boundary
- County Line

Special Status Wildlife:

Listed and Fully Protected Species

- Arroyo Toad Tadpole
- Arroyo Toad
- California Condor
- California Gnatcatcher
- Golden Eagle
- Least Bell's Vireo
- Swainson's Hawk
- Unarmored Threespine Stickleback
- White-Tailed Kite
- White-Tailed Kite Nest
- Willow Flycatcher (migrant observations)

0 0.250.5 1 Miles

n

APPROXIMATE SCALE IN MILES

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-24

Landmark Village EIR

DUDEK

RMDP/SCP - Listed and California Fully Protected Wildlife Species Occurrences

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, also could result in secondary effects to the California condor. Adverse secondary effects to condors may occur as a result of the animal's collection of microtrash (*i.e.*, broken glass, paper and plastic waste, small pieces of metal). This waste is often brought back to nest sites where young birds ingest the material. This can possibly lead to mortality of young birds. Ethylene glycol, a component in antifreeze and petroleum products can also be ingested by condors, which could possibly result in injury or mortality. Secondary impacts related to phone towers, power lines, and utility poles, could increase the potential for collisions; increased microtrash within residential and commercial areas, which has been known to attract and be ingested by California condors, causing sickness or possibly mortality; and the presence of various contaminants, such as radiator fluid, which have been known to be ingested by California condors, causing sickness or possibly mortality. At the watershed level these secondary effects could be a potential significant cumulative effect. The contribution of the proposed RMDP/SCP project, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The California condor sporadically forages on the proposed RMDP/SCP project site, and possibly in other present and foreseeable future project sites, but nesting is not expected to occur. Nest habitat typically includes cliff faces and, occasionally, large tree snags with cavities. Condors are not expected to nest in the RMDP/SCP project area due to the general lack of adequate nesting habitat. Other past, present, and reasonably foreseeable projects also tend to be located in the lower elevations of the watershed that lack these necessary microhabitat features. It was determined above that the loss of habitat resulting from present and foreseeable future projects, including the proposed RMDP/SCP project, would not be a significant cumulative impact. Nonetheless, potential foraging habitat is present in the upper regions of the High Country SMA/SEA 20 and Salt Creek area and would not be affected by buildout of the Specific Plan, VCC, or Entrada planning areas, including the Landmark Village project. The mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR would result in a large, managed open space system (**Subsection 4.4.10, Project Mitigation Measures**). Generally, protection, restoration and enhancement, and management habitat in the High Country SMA/SEA 20 and Salt Creek area would provide California condors with a large tract (5,720 acres) of relatively undisturbed habitat suitable for foraging. Although the number of cattle would be reduced on site, ongoing resource management using cattle would occur and deer herds would continue to use the High Country SMA/SEA 20 and Salt Creek area, providing foraging opportunities for condors.

To reduce or avoid potential construction-related injury or mortality of individuals, the applicant would implement measures during construction to monitor for the presence of birds, and collect all litter, small items, vehicle fluids, and food waste from the RMDP/SCP project area on a daily basis. Workers would be

trained on the issue of microtrash; what it is, its potential effects to California condors, and how to avoid the deposition of microtrash. In the event California condors are observed landing in the construction area, all work activities shall be suspended until the bird has left the area.

To reduce long-term secondary impacts, limited recreational usage and access restrictions within the High Country SMA/SEA 20, control of pets in or near open space areas, trail signage, and homeowner education regarding special-status resources in preserved natural habitat areas would help protect California condors foraging in the High Country SMA/SEA 20 and Salt Creek area. Installation of new or relocation of existing phone and cell towers, power lines, and utility poles in the High Country SMA/SEA 20 and Salt Creek area would be coordinated with CDFG and structures would be designed in accordance with Avian Power Line Interaction Committee (APLIC 2006) guidelines and operated with anti-perching devices to help reduce collisions and electrocutions of California condors.

In addition to these mitigation measures which would reduce RMDP/SCP project-related construction and long-term impacts to California condor and provide foraging opportunities in the RMDP/SCP project area (although on a more limited scale than currently exists), this species has an extremely large foraging range that spans the SCWR and beyond. California condors are frequently observed in National Forest system lands. The USFWS maintains a feeding station to provide a reliable food source for condors in Los Padres National Forest, but individuals opportunistically forage on dead cattle on large cattle ranches within the SCRW, including Newhall Ranch (Grantham 2009).

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Coastal California Gnatcatcher (FT). Focused surveys have not documented resident breeding populations of the coastal California gnatcatcher on site in surveys between 1995 and 2007, but individuals have been observed twice in the proposed RMDP/SCP project area during the course of biological monitoring. One observation was in October 2007 in the VCC planning area and the other in August 2008 east of the Del Valle Training Center (which is just outside the proposed RMDP/SCP project boundary, north of SR-126 and west of Chiquito Canyon). Both observations were considered to be dispersing individuals because no breeding gnatcatchers have been observed in the proposed RMDP/SCP project area and the observations were made when dispersal would be expected to be occurring. Generally, there are few documented coastal California gnatcatcher populations in the SCRW. In addition to the two individuals reported in the proposed RMDP/SCP project area, there are occurrences of individuals approximately six miles to the east in Plum Canyon in 1999, Golden Valley Road in 2001, and

Golden Valley Ranch in 1997 (**Figure 4.4-25**). The nearest observation of a coastal California gnatcatcher pair (assumed breeding pair observed in 1999) is in Chivas Canyon 3.6 miles to the south, but that location is outside the SCRW boundary and on the southern side of the Santa Susanna Mountains. The nearest relatively large breeding population is in Moorpark (15 occurrences) outside the SCRW, about 12 miles to the southwest of the proposed RMDP/SCP project area and south of the Santa Susana Mountains

Based on these observations, the coastal California gnatcatcher is considered to be an irregular visitor in the proposed RMDP/SCP project area in association with dispersal. Although the site appears to provide habitat for dispersal and nesting has not been documented during protocol-level, it is unknown whether the site could support nesting populations of coastal California gnatcatcher in the future (*e.g.*, whether there could be colonization of the site by breeding individuals).

On December 19, 2007, the USFWS published the Revised Designation of Critical Habitat for the coastal California gnatcatcher (72 FR 72009-72213). The Revised Designation reduced the final critical habitat designation by 298,492 acres compared to the 2003 Proposed Rule. The Revised Designation included a re-evaluation of Unit 13 (which included the proposed RMDP/SCP project area, and the USFWS determined that the portions of the Santa Clarita Valley including the proposed RMDP/SCP project area, are "not essential to the conservation of the coastal California gnatcatcher." (72 FR 72013). The USFWS determined that the excluded area does not have the spatial configuration and primary constituent elements essential to the conservation of the species. Designated critical habitat (Unit 13) extends north to the southern boundary of Newhall Land that includes the High Country SMA/SEA 20, but the nearest proposed development zone in Potrero Canyon is approximately 2.2 miles north of the critical habitat boundary. No recovery plan for the coastal California gnatcatcher has been published.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 174,000 acres of coastal scrub habitat that support, or have the potential to support, the coastal California gnatcatcher, at least during dispersal. Because of the few and scattered observations of the species in the SCWR, however, it is likely that the vast majority of coastal scrub habitat in the watershed is not used by the coastal California gnatcatcher. This vocal species is highly detectable within its breeding range, so most important breeding locations probably have been documented. In addition, especially in the higher elevations of the watershed, temperatures are, on average, much colder and conditions are wetter. Even in the main portion of this species' range in southern California, 99 percent of occurrences are below 2,500 feet (65 FR 63680).

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 20,000 acres of coastal scrub, although it is not expected that the coastal California gnatcatcher uses all of this habitat. Without accounting for past, present, or reasonably

foreseeable mitigation, or the RMDP/SCP project's (which includes Landmark Village) individual contribution to mitigation for loss of suitable habitat, this could be a potential significant cumulative impact on habitat that is suitable for the species. Because this federally listed species occurs sporadically in the watershed and its selection of habitat for dispersal and potentially breeding in the SCRW is not understood, the relative value of coastal scrub habitat in the watershed for this species also is not known. Even a small loss of habitat, if located in a strategic area for dispersal or breeding, could have a substantial adverse effect on the habitat use and distribution of the coastal California gnatcatcher in the SCRW if it disrupted dispersal or breeding activities. The proposed RMDP/SCP project's contribution to this potentially significant cumulative impact is 1,520 acres of coastal scrub, including 231.9 acres of coastal scrub within the Landmark Village project (see **Table 4.4-9**), which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, could also result in long-term secondary impacts, including habitat fragmentation; wildfire; increased human activity; lighting; pesticides, which may cause secondary poisoning and loss of food resources; harassment by pet, stray, and feral cats and dogs and other mesopredators; and Argentine ants that may prey on nestlings. At the watershed level these secondary effects could be a potential significant cumulative effect. The contribution of the proposed RMDP/SCP project, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

Based on existing survey information, two dispersing coastal California gnatcatcher individuals have been documented in the RMDP/SCP project vicinity and nesting has not been observed. Approximately 154,000 acres of coastal scrub habitat would remain in the watershed, although how much of this habitat is suitable for dispersal or breeding is unknown. There is at least one breeding occurrence in the SCRW in Plum Canyon. In addition, mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended by this EIR would result in a large, managed open space system (**Subsection 4.4.10, Project Mitigation Measures**). The proposed RMDP/SCP project also includes large mitigation areas in the High Country SMA/SEA 20 and Salt Creek area that would conserve approximately 1,940 acres of coastal scrub and would allow for dispersal by coastal California gnatcatchers.

Legend

- RMDP Boundary
- SCP Boundary
- County Boundary
- California Sagebrush (Newhall Data)
- California Sagebrush (State Data)
- California Gnatcatcher Sightings

0 1 2 4 Miles

APPROXIMATE SCALE IN MILES

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-25

Landmark Village EIR

DUDEK

California Gnatcatcher Observations and Habitat within the Greater Newhall Ranch Region

Long-term secondary impacts would be minimized through several mitigation measures in addition to the preservation of 1,940 acres of suitable habitat in the High Country SMA/SEA 20 and Salt Creek area. Lighting restrictions along the perimeter of natural areas would help reduce predation of nest sites by predators and reduce behavioral disturbances and physiological stress. Limited recreational usage and access restrictions within the High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect coastal California gnatcatchers by allowing them to nest and forage without disturbance. Controls on pesticides would reduce the chance of direct and secondary poisoning and loss of food sources.

The coastal California gnatcatcher has not been observed nesting in the RMDP/SCP project area and only one breeding occurrence has been documented in the SCRW. Although suitable habitat is present in the RMDP/SCP project area, it is unknown why this species does not breed on site. Dispersal through the RMDP/SCP project area would not be precluded and this species is still relatively common in the main portion of its range, south of the RMDP/SCP project area.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

California Red-Legged Frog (FT). The California red-legged frog has not been observed in the proposed RMDP/SCP project area during the numerous wildlife surveys conducted since 1992. The species is believed to be absent from the proposed RMDP/SCP project region. The San Marino Environmental Associates (SMEA 1995) report states that Thomas Haglund observed red-legged frogs in the mid-1970s in the Santa Clara River at Fillmore and that "this may represent the last sighting of this species in the Santa Clara River" (p. 37). The Museum of Vertebrate Zoology (U.C. Berkeley 2003) lists 17 specimens from Soledad Canyon (Santa Clara River channel) in its collection from as recently as 1953 (more precise locality data are unavailable). The California Academy of Sciences (CAS 2003) also lists a Soledad Canyon specimen, from 1950. The nearest specific locality upstream of the proposed RMDP/SCP project area is approximately 15 miles away, near the confluence with Agua Dulce Creek. Jennings and Hayes (1994) and the CNDDB indicate that this species still occurs in the SCRW in sites along San Francisquito Creek five to 10 miles northeast of the proposed RMDP/SCP project area, and in tributaries to the Santa Clara River in Ventura County. The closest documented Ventura County occurrence is in Piru Creek 4.5 miles north of the community of Piru (USFWS 2002A), about seven miles northwest of the proposed RMDP/SCP project area. San Marino Environmental Associates (SMEA 1995) also cite a personal communication from Sam Sweet reporting sighting of red-legged frogs in Piru Creek, but no date for the

observation(s) is provided. San Marino Environmental Associates (SMEA 1995) suggested that it probably has a low probability of colonizing the RMDP/SCP project site because of the relatively long distances to extant occurrences within tributaries upstream and downstream of the RMDP/SCP project area. The only critical habitat unit upstream is the San Francisquito Creek (LOS-1) Unit, which is located approximately five miles northeast of the RMDP/SCP project area. This distance, coupled with the existing stream conditions in San Francisquito Creek (*i.e.*, dry gaps, absence of flowing water during most of the year), likely limit the potential for this species to disperse through this area. Furthermore, existing hydrologic conditions in the Santa Clara River probably limit its potential to establish breeding sites in the RMDP/SCP project area. California red-legged frogs generally avoid large river channels with widely fluctuating flows, because such habitat usually does not permit reproductive activity (Hayes and Jennings 1988). For example, episodic winter flooding typical of the Santa Clara River may dislodge egg masses. Further, fluctuating water levels before summer typical of the Santa Clara River could kill tadpoles before they could metamorphose. Given these characteristics, other portions of the Santa Clara River within the RMDP/SCP project area are also not expected to provide breeding habitat for the species.

Critical habitat was originally designated for the California red-legged frog in 2006 (71 FR 19244-19346), but revised critical habitat was proposed in September 2008 to better characterize those areas containing essential features for the species (73 FR 53492-53680). Based on the proposed revised critical habitat designation, two critical habitat units are in the SCRW: the 4,231-acre San Francisquito Creek (LOS-1) Unit located approximately five miles northeast of the proposed RMDP/SCP project area, and the 8,837-acre Piru Creek (VEN-2) Unit located seven miles northwest of the proposed RMDP/SCP project area. These two critical habitat units were not changed in the 2008 proposed revision. Three other critical habitat units were designated in Ventura County in the proposed revision: the 2,915-acre San Antonio Creek (VEN-1) Unit; the 5,000-acre Upper Las Virgenes Canyon (VEN-3) Unit; and the eastern portion of the 145,121-acre Upper Santa Ynez River and Matilija Creek, which overlaps with the western portion of Ventura County. These three other critical habitat areas are outside the SCRW. No designated critical habitat units for the California red-legged frog include any portion of the proposed RMDP/SCP project site. The Recovery Plan for the Red-legged Frog was published by the USFWS on May 28, 2002 (USFWS 2002B). In Recovery Unit 7, a core area is identified as the Ventura River-Santa Clara River. However, the portion of the Santa Clara River within the proposed RMDP/SCP project area is not in this core area and is not included in the Recovery Plan (USFWS 2002B).

Given these verified records upstream and downstream of the proposed RMDP/SCP project area and elsewhere in the SCRW, the proposed RMDP/SCP project area is within the potential distribution of the California red-legged frog along the Santa Clara River. However, as discussed above, the California red-legged frog is not likely to colonize the site because it has limited long-distance dispersal capabilities, the distances to extant upstream and downstream locations are relatively long, and existing hydrologic

conditions are not conducive to breeding. However, for the purpose of this cumulative analysis, it is assumed that there is some potential for the species to use the RMDP/SCP project area for dispersal and breeding.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 25,000 acres of riparian habitat in the SCRW. However, not all 24,000 acres support California red-legged frogs or could be reasonably expected to support them. As noted above, the documented distribution of the California red-legged frog in the SCRW is very scattered and confined to a few locations.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 1,030 acres of 25,000 acres of riparian habitat. Without accounting for past, present, or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of riparian habitat in the SCRW could result in a potential significant impact on potential habitat for the California red-legged frog. However, as described above, the permanent loss of riparian habitat from present and reasonably foreseeable projects would be reduced by CDFG and Corps mitigation requirements consistent with their policies for no net loss of wetlands (although net functions and values/services of wetland habitats may be reduced (Ambrose *et al.* 2006)). The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 230 acres, which, if occupied, could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, could also result in potential long-term secondary effects, including increased human activity; habitat degradation and collection; lighting invasive species, including Argentine ant and invasive plants such as giant reed; pet, stray, and cats and feral dogs; vehicle collisions; and use of pesticides. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

Both the Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures that protect riparian habitat and establish a large, managed open space system (**Subsection 4.4.10, Project Mitigation Measures**). These measures would reduce impacts to the California red-legged frog, if it were to colonize the RMDP/SCP project area in the future. These mitigation measures include preservation, restoration, and enhancement of riparian and wetland habitat. Large areas of suitable habitat for this species would be protected in the River Corridor SMA/SEA 23. The Floodplain Hydraulics Impacts Assessment (PACE 2008**,** Recirculated Draft EIR**, Appendix 4.4**) found

that there would be no significant impacts in water flows, velocities, depth, sedimentation, or floodplain and channel conditions downstream of the proposed RMDP/SCP project area over the long term as a result of the proposed RMDP/SCP project improvements (although, as noted above, existing hydrologic conditions probably are not conducive to breeding by this species).

The River Corridor SMA/SEA 23 would provide a large, protected open space area that would help also offset long-term secondary impacts. Several specific mitigation measures would also be implemented to control human activities in the River Corridor SMA/SEA 23, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting along the open space-urban interface would be downcast. Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats in the open space system would be monitored and controlled to the extent feasible. Implementation of these measures would allow this species to persist on site after development in the River Corridor SMA/SEA 23 if it were to colonize the site in the future.

In addition to these measures, which would reduce RMDP/SCP project-related impacts to this species, California red-legged frog has not been documented within the RMDP/SCP project area and the nearest known occurrences are five and seven miles away, respectively.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Golden Eagle (CFP). The golden eagle has been occasionally observed during the annual bird surveys conducted from 1988 through 2008 along the Santa Clara River within the riparian scrub and woodland habitat. Off site, they were also observed along the Santa Clara River east and west of the proposed RMDP/SCP project site. No nesting has been observed in the proposed RMDP/SCP project area. In winter 2008, one juvenile and one pair was seen in upper Potrero Canyon and it is believed that this is likely a resident pair, but no nest site has been identified to date (Bloom Biological 2008). In addition, in March 2008 a helicopter survey was conducted over Newhall Land property to search for raptor nests on cliffs and in steep canyons, with the focus on upland areas of the ranch. One active golden eagle nest was located off Newhall Land property on a north-facing cliff at the top of Dewitt Canyon, which is a drainage off Pico Canyon. In fall 2008 two golden eagles were observed resting on a rugged outcrop in the upper portion of the Salt Creek area in Ventura County (Bedford 2009). The CNDDB contains three records for past nest sites for the golden eagle in Los Angeles County and two records for Ventura County, but none of the occurrences are in the SCRW—four of the five are in the Santa Monica Mountains

and one is in the Tehachapi Mountains. The SCRW supports a large amount of potential nesting and foraging habitat in the SCRW, especially in the Los Padres National Forest, and in the RMDP/SCP project site, within the preserved areas of the High Country SMA/SEA 20 and Salt Creek area.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), within the SCRW there are approximately 257,000 acres of suitable nesting and foraging habitat (California annual grassland, agriculture, disturbed land, coastal scrub, and oak woodland) for the golden eagle, although it cannot be assumed that golden eagles actually use all 257,000 acres. Foraging territories are related to nest locations, prey density and availability, and the openness of terrain. Even though home ranges, which probably reflect an individual's total foraging territory, can be large, individuals focus their activity in a smaller core area that provide these resources (Marzluff *et al.* 1997). Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 24,000 acres of 257,000 acres of suitable nesting and foraging habitat. It is assumed for this analysis that some of this habitat could occur in core activity areas, the loss of which could alter the individual's use of its territory and potentially cause nest abandonment. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of habitat in the SCRW potentially would result in a potential significant cumulative impact on suitable habitat for the golden eagle. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 4,905 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including an increased potential for collisions with phone towers, power lines, and utility poles, resulting in physical injury or death as a result of the collision or from electrocution. Reproductive success also could be affected by increased noise; lighting; pesticides that may cause secondary poisoning and loss of prey; human disturbances of nest sites; and pet, stray, and feral cats and dogs. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would result in a large, managed open space system comprised of the High Country SMA/SEA 20, Salt Creek area, and River Corridor SMA/SEA 23 that provides approximately 4,070 acres of suitable foraging and nesting habitat for the golden eagle. This open space system would also help protect the golden eagle from long-term secondary impacts, such as collisions with phone towers, power lines, and utility poles, and "edge effects" caused by human activity. Several

specific mitigation measures for long-term secondary effects would also be implemented. Lighting restrictions along the perimeter of natural areas would help reduce impacts to potential nest sites. Limited recreational usage and access restrictions within the High Country SMA/SEA 20, control of pet, stray, and feral cats and dogs in or near open space areas, trail signage, and homeowner education regarding special-status resources in preserved natural habitat areas would help protect golden eagles during foraging activities and potential nest sites. Controls on pesticides (including rodenticides) would reduce the chance of accidental poisoning and potential loss of prey. Installation of new or relocation of existing phone and cell towers, power lines, and utility poles in the High Country SMA/SEA 20 and Salt Creek area would be coordinated with CDFG and structures would be designed in accordance with Avian Power Line Interaction Committee (APLIC 2006) guidelines and operated with anti-perching devices to help reduce collisions and electrocutions of golden eagles.

In addition to these measures, which would reduce RMDP/SCP project-related impacts to this species, golden eagle is known to occur within much of the watershed, including National Forest system lands. While this species has not been documented to nest within the RMDP/SCP project area, the proposed RMDP/SCP project would not impede use of the High Country SMA/SEA 20 and Salt Creek area or other open space within the watershed for foraging or nesting.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Least Bell's Vireo (FE, CE). The least Bell vireo's breeding distribution extends to eight California counties: Imperial, Kern, Los Angeles, Riverside, Santa Barbara, San Bernardino, San Diego and Ventura (CDFG 2005). About half of the least Bell vireo in California occur at Camp Pendleton in San Diego County (CDFG 2005). The least Bell's vireo nests in moderate numbers in the SCRW. The USFWS (2006) conducted a five-year status review of the least Bell's vireo that compiled comprehensive survey data for five-year increments from 1977 to 2005, and from which the USFWS estimated least Bell's vireo territories.[26] An estimated 173 territories occurred in Los Angeles and Ventura counties as of 2006, which accounted for about 6 percent of the estimated total of 2,968 territories in California (USFWS 2006; **Table 4.4-26**). Of the 173 territories in Los Angeles and Ventura counties, 119 (69 percent) occur in the Santa Clara River population unit identified in the Draft Recovery Plan (USFWS 1998). Annual survey

[26] It should be noted that these data represent a minimum estimate of least Bell's vireo territories because they are a composite of multiple surveys covering different reaches and may exclude large stretches of suitable habitat that were not surveyed (USFWS 2006); in other words, these data do not represent a single snapshot of the entire occupied vireo range.

data have been collected for the least Bell's vireo in the proposed RMDP/SCP project vicinity between 1988 and 2007, including the Specific Plan and VCC planning areas and a portion of the Entrada planning area, as well as adjacent areas of Newhall Land property from the Las Brisas Bridge crossing on the west in Ventura County to I-5 on the east. Least Bell's vireo, including breeding pairs, territorial males, and/or nests, have been observed almost every year along the Santa Clara River within the Specific Plan area, and over multiple years within the VCC planning area and adjacent to the proposed RMDP/SCP project site in Castaic Junction in riparian scrub habitat (**Figure 4.4-26**), but with yearly fluctuations in level of occupancy and breeding activity.

Table 4.4-26
Estimate of Least Bell's Vireo Territories by County[1]

Estimate of Least Bell's Vireo Territories (and Percentage of the Total Population) for a Given Range of Years[2]					
County	**1977–1985[3]**	**1986–1990**	**1991–1995**	**1996–2000**	**2001–2005**
San Diego[4]	223 (77%)	401 (76%)	1,118 (78%)	1,899 (76%)	1,609 (54%)
Riverside[5]	29 (10%)	50 (9%)	223 (16%)	395 (16%)	898 (30%)
Orange	1 (<1%)	3 (1%)	16 (1%)	68 (3%)	177 (6%)
San Bernardino	0 (0%)	2 (<1%)	5 (<1%)	20 (1%)	87 (3%)
Los Angeles	6 (2%)	1 (<1%)	4 (<1%)	13 (1%)	56 (2%)
Ventura[6]	5 (2%)	8 (2%)	35 (2%)	86 (3%)	117 (4%)
Santa Barbara[7]	26 (9%)	57 (11%)	32 (2%)	12 (<1%)	12 (<1%)
Inyo	0 (0%)	4 (1%)	5 (<1%)	0 (0%)	11 (<1%)
Kern	0 (0%)	0 (0%)	1 (<1%)	0 (0%)	0 (0%)
Monterey	0 (0%)	3 (1%)	0 (0%)	0 (0%)	0 (0%)
San Benito	1 (<1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Stanislaus	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<1%)
Total	*291*	*529*	*1,439*	*2,493*	*2,968*
Percent Increase from Previous Period	—	*82%*	*172%*	*73%*	*20%*
Percent Increase since Listing	—	*82%*	*394%*	*753%*	*920%*

[1] *Reproduced from USFWS (2006).*
[2] *Estimates based on composite of surveys across the specified range of years.*
[3] *From the original listing (51 FR 16474).*
[4] *Approximately 50% or greater from Camp Pendleton.*
[5] *Approximately 90% or greater from the Santa Ana River and its tributaries.*
[6] *Approximately 90% or greater from the Santa Clara River.*
[7] *Approximately 90% or greater from the Santa Ynez River.*

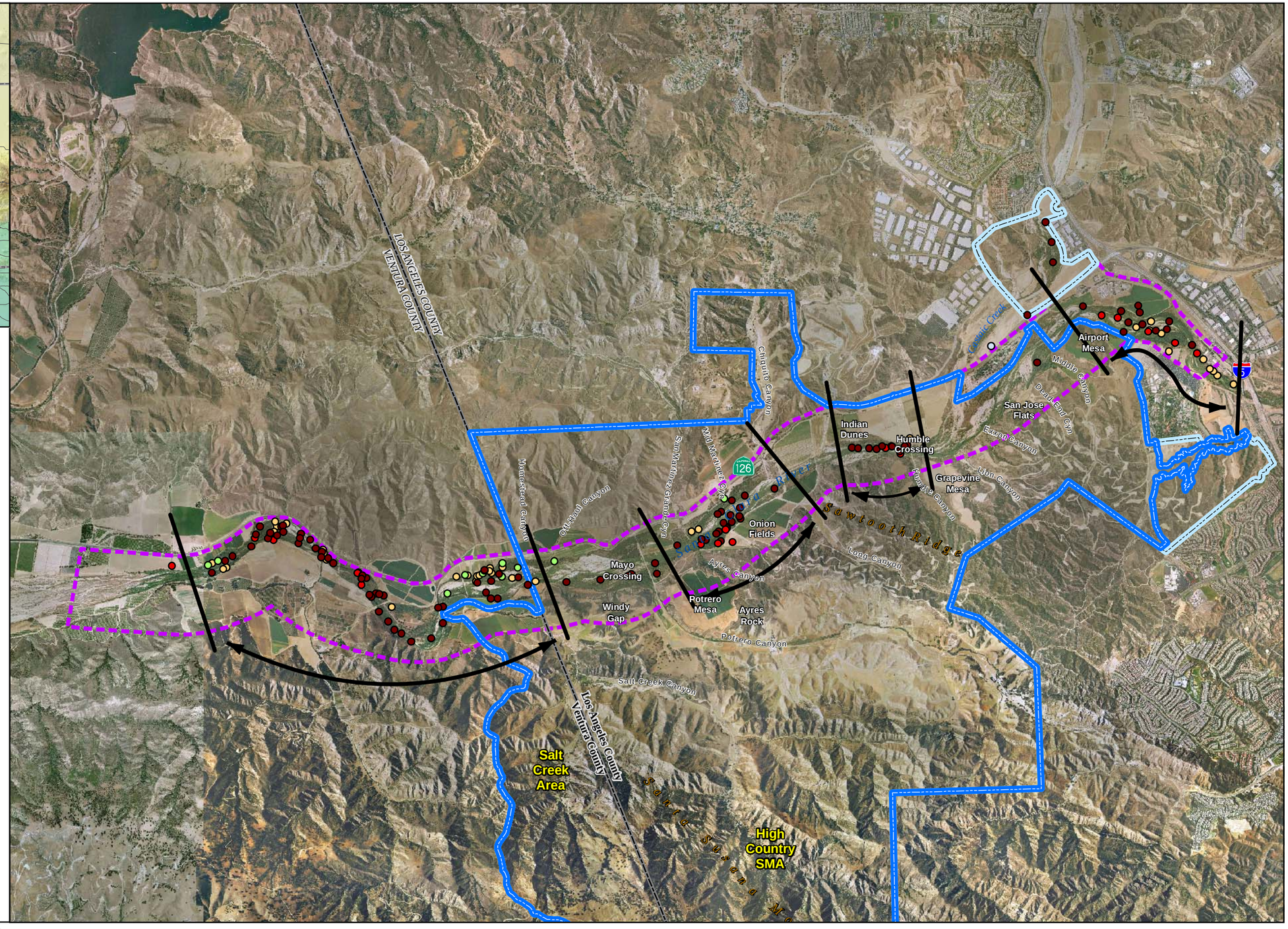
The USFWS made a final critical habitat designation for the least Bell's vireo on February 2, 1994 (59 FR 4845). The USFWS vireo critical habitat designation covers approximately 38,000 acres at 10 different

locations in six counties in southern California: Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego. The proposed RMDP/SCP project site includes a portion of the Santa Clara River critical habitat unit located in Ventura and Los Angeles counties (**Figure 4.4-26, Least Bell's Vireo Critical Habitat in Santa Clara River Critical Habitat Unit**). The Santa Clara River unit includes all land within a 3,500-foot-wide zone along the Santa Clara River south of State Route 126 (SR-126) from a point approximately 2.3 miles east of the intersection of Main Street and SR-126 in Piru on the west to the intersection of SR-126 and The Old Road and eastward and southward along The Old Road to its intersection with Rye Canyon Road. The Santa Clara River critical habitat unit comprises approximately 4,410 acres (approximately 12 percent) of the total 38,000 acres of least Bell's vireo critical habitat. Of this, least Bell's vireo critical habitat within the proposed RMDP/SCP project area totals 2,252 acres (**Figure 4.4-26**). However, 405 acres of the 2,252-acre least Bell's vireo critical habitat designation within the proposed RMDP/SCP project area consists of primary constituent elements of vireo critical habitat.

A Draft Recovery Plan for the Least Bell's Vireo (*Vireo bellii pusillus*) was published by the USFWS in 1998 (USFWS 1998). The recovery strategy focuses on two major causes of decline of the species: (1) habitat loss and degradation, and (2) brown-headed cowbird parasitism. The Draft Recovery Plan identified 14 vireo "population/metapopulation units," including the Santa Clara River population unit. The Draft Recovery Plan does not identify the geographic limits of the Santa Clara population unit, simply stating that "habitat for the [vireo] occurs in patches along much of the river, with location and quality varying from year to year as conditions in the river change following winter storm events" (USFWS 1998, p. 58).

Fourteen federal biological opinions were issued for the least Bell's vireo between 1993 and 2006 in the SCRW (**Table 4.4-20**). CDFG has recently issued four take authorizations for least Bell's vireo in the general regional vicinity of the proposed RMDP/SCP project (**Table 4.4-21**).

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 25,000 acres of riparian habitat in the SCRW. However, not all 25,000 acres support least Bell's vireos or could be reasonably expected to support them. Because the vireo primarily is limited to the Santa Clara River within the watershed, it is likely that a relatively large proportion of riparian habitat in the SCRW is not occupied because it does not support the primary constituent elements of vireo habitat. As described above, the reach of the Santa Clara River within the RMDP/SCP project area consistently has supported a breeding population since surveys began in 1988 and is designated critical habitat for this species.



Legend

- RMDP Boundary
- SCP Boundary
- County Boundary
- Least Bell's Vireo Critical Habitat in Santa Clara River Critical Habitat Unit - USFWS

Local Key Population Areas

Least Bell's Vireo Locations

- 1980 - 1989
- 1990 - 1995
- 1996 - 1999
- 2000 - 2003
- 2004 - 2007

0 0.25 0.5 1 Miles

APPROXIMATE SCALE IN MILES

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-26

Landmark Village EIR

DUDEK

Least Bell's Vireo Critical Habitat in Santa Clara River Critical Habitat Unit

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 1,030 acres of the 25,000 acres of riparian habitat within the watershed; however, the proportion of occupied least Bell's vireo habitat that could be impacted by development is probably substantially higher because most occupied habitat is probably in the Santa Clara River and the larger tributaries where development pressure is higher. Smaller and more remote drainages that support riparian habitat, but which is less likely to be occupied by the vireo, probably are under less development pressure. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a potential significant cumulative impact on potential habitat for the least Bell's vireo. However, as described above, the permanent loss of riparian habitat from past, present, and reasonably foreseeable cumulative development would be reduced by CDFG and Corps mitigation requirements consistent with their policies for no net loss of wetlands (although net functions and values/services of wetland habitats may be reduced (Ambrose *et al.* 2006)). The contribution of the proposed RMDP/SCP, the Landmark Village project, to this potential significant cumulative impact is 230 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including nest parasitism by cowbirds; traffic noise; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for the least Bell's vireo could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to the least Bell's vireo. This mitigation would result in the preservation and management of at least 332 acres of suitable habitat, primarily in the River Corridor SMA/SEA 23, that would be available for future breeding populations of least Bell's vireo. These mitigation measures also include restoration and enhancement of riparian and wetland habitat. Specific measures to reduce secondary impacts include controls on public access; invasive species controls; conformance with permits from federal and state agencies for impacts to wetlands and water quality (*i.e.*, NPDES and section 401 Permits); lighting controls; pesticides controls; and cowbird trapping.

In addition to site-specific mitigation measures, and mitigation anticipated for other present and reasonably foreseeable project impacts to achieve the no net loss of riparian acreage, recent population estimates for the vireo indicate that the breeding populations are expanding both in range and size as a result of restoration and enhancement of riparian habitat and management of brown-headed cowbirds (USFWS 2006). Within the watershed breeding vireo occur both upstream and downstream of the proposed RMDP/SCP project in areas that would not be subject to disturbance of present and reasonably foreseeable projects.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Ringtail Cat (CFP). The ringtail cat was not observed in the proposed RMDP/SCP project area during track/scent station monitoring for mammals or during numerous wildlife surveys conducted in the Specific Plan area. The nearest recent documented occurrence of ringtail cat is a 2007 observation in Elderberry Canyon approximately 0.5 mile above Castaic Dam in a narrow, rocky canyon (Huntley 2009). There are also two recorded occurrences of ringtail cat in Los Angeles County: in the Santa Monica Mountains and on the southern flank of the San Gabriel Mountains (Belluomini 1980). If this species occurs in the SCRW, it is most likely to occur in canyons and ravines associated with water sources and riparian and woodland habitats, including lower elevation oak woodlands, higher elevation coniferous forests, and juniper and pinyon woodlands. For this reason, habitat was modeled using riparian vegetation communities.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), habitat within the SCRW considered suitable for ringtail cats consists of approximately 25,000 acres of riparian habitat. However, habitat used by ringtail cats is strongly associated with microhabitats that include perennial water sources, rocky outcrops in canyons, tree cavities, *etc*. Although there have been few observations of ringtail cats in the region, this species could occur within suitable habitat within the watershed. It is likely that most of this suitable habitat is not occupied, probably due to a lack of habitat elements necessary for occupation, such as permanent waters sources.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 1,030 acres of 25,000 riparian habitat. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a potential significant cumulative impact on potential habitat for the ringtail cat. The contribution of the proposed

RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 230 acres, which, if the species were present within the RMDP/SCP project area, could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects including increased human activity; habitat fragmentation; increased vehicle collisions; nighttime lighting; increased predation; and pesticides. If the ringtail were present, at the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would reduce these impacts to a less-than-significant level. Specifically, approximately 1,170 acres of suitable habitat for this species would be preserved and managed in a large open space system composed of the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area. Several specific mitigation measures also would implemented to reduce potential long-term secondary effects, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides, including rodenticides, would be controlled through an integrated pest management (IPM) plan.

In addition to these measures, which reduce RMDP/SCP project-related impacts, this species has not been identified in the RMDP/SCP project area and is not expected to occur. Ringtail cat is expected to occur within the SCRW, but only in association with its required microhabitats. Where this species has been observed within the SCRW, it occurs within National Forest system lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Southern Steelhead (FE). The range of the southern steelhead is from the Santa Maria River along the San Luis Obispo-Santa Barbara County line in the north to the Tijuana River just north of the U.S.–Mexico border in the south. Their historic range within many of these coastal streams was limited by natural barriers, above which no known southern California populations of native rainbow trout or steelhead previously existed. Definitive records of southern steelhead are not available for many of the small coastal streams within the Southern ESU; however, it is believed that most of the streams were inhabited

by southern steelhead. The distribution of southern steelhead within the ocean is not well known, but some evidence indicates that they remain relatively close to the coast and even near the mouths of their natal streams which contrasts with other Pacific salmonid species that range widely in the ocean (NMFS 2007).

The southern steelhead has been recorded within the last decade in Ventura County in the Santa Clara River and the Ventura River. Within the Santa Clara River drainage, southern steelhead historically inhabited Piru Creek, Sespe Creek, Santa Paula Creek, Hopper Creek, and possible Pole Creek (Titus *et al.* n.d.). Presently, southern steelhead occur in the Santa Clara River watershed in Piru Creek between the confluence with the Santa Clara River and Santa Felicia Dam, in Sespe Creek, in Santa Paula Creek, and possibly Hopper and Pole Creeks (Stoeker and Kelly 2005). There is no historic record of steelhead use of the Santa Clara River or tributaries upstream of Piru Creek and the Dry Gap approximately five miles downstream of the RMDP/SCP project area.

The southern steelhead was listed as federally endangered in 1997 in the Southern Evolutionarily Significant Unit (ESU) that extends from the Santa Maria River in the north southward to Malibu Creek without Critical Habitat (62 FR 43937-43954). In 2002 the range of the Southern California ESU was extended south to the United States-Mexico Border (67 FR 21586-21598). In 2005, the Final Critical Habitat Designation for the Southern California Coast ESU was determined (70 FR 37159-37204). In 2006 the endangered status of the southern steelhead was re-affirmed for 10 Distinct Population Segment (DPS) of West Coast Steelhead (71 FR 834).

In the Santa Clara River watershed, designated critical habitat includes the Santa Clara River and its tributaries from Piru Creek (below Santa Felicia Dam) to the Santa Clara River confluence and downstream to the Pacific Ocean. The upstream extent of designated critical habitat is approximately five miles downstream of the RMDP/SCP project area in Ventura County, California.

A Recovery Plan for southern steelhead, as required by the FESA, has not been published to date. However, a Southern California ESU recovery team has been formed and is currently working on a draft Recovery Plan for southern steelhead within the Santa Clara River and the Southern California ESU. In September 2007, a Federal Recovery Outline for the DPS of southern steelhead was released (NMFS 2007).

The project-level impacts analysis includes a characterization of existing conditions along the Santa Clara River within the RMDP/SCP project area with respect to habitat suitability for the southern steelhead. ENTRIX (2009) conducted quantitative fish habitat surveys of the Santa Clara River and concluded that the RMDP/SCP project reach channel is very low gradient runs and riffles and is dominated by sandy substrate with little or no riparian canopy along the flowing stream. It is not expected that southern steelhead could successfully spawn in this reach due to inadequate substrate material (*e.g.*, lack of gravel for redd development) and sub-optimum water quality conditions related to wastewater outflows from

upstream of the RMDP/SCP project reach. The River habitat for southern steelhead also lacks requisite channel structure and pool habitat necessary to support rearing. If the southern steelhead could migrate into the RMDP/SCP project reach, requiring passage through the Dry Gap area (an area downstream of the Los Angeles County/Ventura County line where surface flows in the river are lost to the Piru groundwater basin), it would face significant challenges in successfully completing its life history cycle due to unsuitable River and tributary spawning and rearing habitat. For these reasons, the project-level analysis was conducted under the assumption that southern steelhead and its habitat for spawning and rearing are not present in the RMDP/SCP project area, and thus concluded that impacts to southern steelhead spawning and rearing habitat would be less than significant for the RMDP project. It was also concluded that no impacts to habitat would occur as a result of buildout of the Specific Plan, VCC, and Entrada areas. For these reasons, the proposed RMDP/SCP project is not expected to contribute to a potential significant cumulative impact on habitat for steelhead in the SCRW that may occur as a result of downstream projects.

With respect to potential impacts on individuals, the project-level analysis assumed that vagrant southern steelhead could be found during surveys or fish exclusion activities prior to construction, although this event is considered to be very unlikely over the approximately 20-year duration of the RMDP/SCP project due to the lack of historical records for this species upstream of Piru and the Dry Gap. As noted above, these individuals would not be expected to spawn in the RMDP/SCP project area. The impact to southern steelhead individuals resulting from the proposed RMDP/SCP project, therefore, was determined to be less than significant. For these reasons, the proposed RMDP/SCP project is not expected to contribute to a potential significant cumulative impact to individual steelhead that may occur as a result of downstream projects.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, could result in potential long-term secondary effects such as hydrologic, geomorphic, and water quality impacts. It was determined that the proposed RMDP/SCP project has the potential to affect southern steelhead individuals and habitat downstream of the RMDP/SCP project area through short- or long-term hydrologic, geomorphic, or water quality alterations of the River. These potential impacts include long-term effects associated with operation of RMDP facilities and buildout of the RMDP/SCP project area such as physical changes in the River and increased discharges. Specific impacts include alterations in base flows, timing and duration of flood flows, biochemical changes, condition and composition of the substrate, aquatic and riparian vegetation (including exotic species), and water temperatures, as well as increased pollutants from irrigation runoff and increased runoff from roadways. Additional secondary impacts associated with increased human presence include incidental litter and trash from recreation activity; impacts such as fecal material from pet, stray, and feral cats and dogs entering the aquatic system; and increased

predation by exotic predators, such as bullfrogs and non-native fish. However, due to the approximately five-mile distance from documented occurrences of southern steelhead at Piru Creek and the intervening Dry Gap, these potential secondary effects would be substantially attenuated before they could affect any downstream habitat and individuals. Therefore, the proposed RMDP/SCP, including the Landmark Village project, is not expected have a considerably cumulatively contribution to potential significant secondary cumulative impacts in the SCRW.

Although the RMDP/SCP project would not contribute to potential significant secondary impacts to the steelhead in the SCRW, and, therefore, no mitigation for secondary cumulative impacts is required, the combined mitigation required by the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would additionally reduce the potential for secondary impacts to southern steelhead and its habitat downstream of the RMDP/SCP project site. Impacts such as increased chemical pollutants, sedimentation, and increased human activity would be mitigated by measures such as the protection and management of the River Corridor SMA/SEA 23, creation of buffer areas between the River Corridor SMA/SEA 23 and development, water quality requirements, and restrictions on public access. PACE (2008**,** Recirculated Draft EIR**, Appendix 4.4**) found that there would be no significant impacts to water flows, velocities, depth, sedimentation, or floodplain and channel conditions downstream of the RMDP/SCP project area over the long term as a result of the proposed RMDP/SCP project improvements. Furthermore, the Newhall Ranch Wastewater Reclamation Plant (WRP) would be a near-zero discharge facility, and only limited discharge from the WRP to the Santa Clara River would occur during the winter months. Based on an analysis of post-development conditions within the Dry Gap (GSI Water Solutions 2008, Recirculated Draft EIR**, Appendix 4.3**), it was determined that the future WRP discharge would not affect the seasonality (*i.e*., ephemeral nature) of flows through the Dry Gap.

Impacts to southern steelhead habitat and vagrant individuals and downstream secondary effects would be less than significant. Potential impacts would be further reduced by a set of mitigation measures for other special-status fish that occur in the RMDP/SCP project area (arroyo chub, Santa Ana sucker, unarmored threespine stickleback) required by the Newhall Ranch Specific Plan Program EIR and recommended by this EIR (**Subsection 4.4.10, Project Mitigation Measures**). Therefore, the proposed RMDP/SCP project would not contribute to potential significant cumulative impacts to southern steelhead in the SCRW.

Southwestern Willow Flycatcher/Willow Flycatcher (FE, CE). Breeding populations of the willow flycatcher exist in isolated meadows of the Sierra Nevada and along the Kern, Santa Margarita, San Luis Rey and Santa Ynez Rivers in southern California (CDFG 2005). Breeding populations of the southwestern willow flycatcher exist in Kern, Santa Barbara and San Diego counties and several other locations in southern California (CDFG 2005). Outside of California, breeding populations of the

southwestern willow flycatcher exist in Arizona, Colorado, Nevada, New Mexico and Utah (CDFG 2005). The willow flycatcher has a sporadic breeding distribution throughout California, where three of the subspecies occur, including little willow flycatcher (*E. t. brewsteri*), *E. t. adastus* (which has no common name other than "willow flycatcher"), and southwestern willow flycatcher (*E. t. extimus*) (Craig and Williams 1998; Sedgwick 2000). The different subspecies of willow flycatcher each occupy distinct breeding ranges and have subtle differences in color and morphology (Sogge *et al.* 1997). The southwestern willow flycatcher was formerly a common summer resident throughout California, but has been extirpated from most of its historical breeding range in the state. The smallest of the breeding populations consists of approximately five pairs and the largest is approximately 50 pairs. The number of southwestern willow flycatchers in California has been estimated at approximately 200, recorded at 22 locations within 13 drainages (Finch *et al.* 2000).

The full species willow flycatcher has been detected almost every year within the River corridor in the proposed RMDP/SCP project area during the focused bird surveys conducted from 1988 to 2007, but no nesting southwestern willow flycatchers have been confirmed on site. All of the observations of willow flycatchers within the region were determined to be migrants because they were only detected once and/or early in the breeding season and June-July period when the southwestern willow flycatcher would be expected if nesting on site. The most recent nearby documented breeding locations for the southwestern willow flycatcher are from the Santa Clara River near Fillmore, downstream of the RMDP/SCP project area. Two breeding pairs were observed in 2006 by J. Gallo, with one nest producing two successful fledglings and the other nest failing (Root 2008). Currently, the proposed RMDP/SCP project area appears to be a migratory stop for one or more of the subspecies of willow flycatcher, but breeding populations of the southwestern willow flycatcher could expand to the proposed RMDP/SCP project area in the future.

On October 19, 2005, critical habitat was designated for the southwestern willow flycatcher (70 FR 60886-61009). Critical habitat in California is designated in Kern, Santa Barbara, San Bernardino, and San Diego counties, but there is no designated critical habitat in the SCRW. The Final Recovery Plan for the Southwestern Willow Flycatcher was published by the USFWS on August 30, 2002 (USFWS 2002C). The proposed RMDP/SCP project area is located within the Coastal California Recovery Unit of the Final Recovery Plan, and establishment of new territories is part of the recovery criteria for the subspecies. Within the Santa Clara River, the reach from Bouquet Canyon Road to the Pacific Ocean, which crosses through the proposed RMDP/SCP project area, has been identified as a Management Unit where recovery actions should be focused (USFWS 2002C).

Six federal biological opinions were issued for the southwestern willow flycatcher between 1993 and 2006 in the SCRW (**Table 4.4-20**). The CDFG has recently issued four take authorizations for southwestern willow flycatchers in the general regional vicinity of the proposed RMDP/SCP project (**Table 4.4-21**).

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 25,000 acres of riparian habitat in the SCRW that provide potential habitat for migrating and nesting willow flycatchers. However, not all 25,000 acres support willow flycatchers or southwestern willow flycatchers or could be reasonably expected to support them. Based on the few documented nesting locations in the SCRW, only a small proportion of this habitat would be expected to support nesting, probably due to a lack of constituent habitat elements necessary for this species. As noted above, within the vicinity of the RMDP/SCP project area, breeding has only been documented in the Fillmore area, located approximately 13 miles to the west of the RMDP/SCP project area. A larger proportion of this habitat is expected to support temporarily migrating birds based on the regular observation of migrating individuals in the RMDP/SCP project area.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 1,030 acres of 25,000 acres of riparian habitat within the watershed; however, the proportion of habitat potentially used for migration and nesting that could be impacted by development is probably substantially higher because most of this potential habitat is probably in the Santa Clara River and the larger tributaries where development pressure is higher. Smaller and more remote drainages that support riparian habitat, but which is less likely to be used by the southwestern willow flycatcher/willow flycatcher, probably are under less development pressure. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a potential significant impact on potential habitat for the southwestern willow flycatcher/willow flycatcher. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant impact is 230 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP, also could result in potential long-term secondary effects, include nest parasitism by cowbirds; traffic noise (southwestern willow flycatcher is unlikely to nest in close proximity to bridge crossing of the Santa Clara River due to traffic noise); nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for the southwestern willow flycatcher/willow flycatcher could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures that would protect riparian habitat and establish a large, managed open space system, all of which would

reduce impacts to the southwestern willow flycatcher/willow flycatcher (**Subsection 4.4.10, Project Mitigation Measures**). This mitigation would result in the preservation and management of at least 332 acres of suitable habitat, primarily in the River Corridor SMA/SEA 23, that would be available for migrating individuals and a breeding population of the southwestern willow flycatcher. These mitigation measures also include restoration, and enhancement of riparian and wetland habitat. Species measures to reduce potential long-term secondary impacts include controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (*i.e.*, NPDES and section 401 permits), lighting controls, pesticides controls, and cowbird trapping.

In addition to the measures described above, which reduce RMDP/SCP project-related impacts, this species has not been observed to breed in the RMDP/SCP project area but is known to use the RMDP/SCP project area as a migratory stop-over. Most of the recorded breeding populations of this species occur well outside of the watershed. While typical nesting habitat (structure of riparian canopy, separation from disturbance, *etc*.) associated with this species does not occur within the RMDP/SCP project area, the documented occurrence of the breeding population downstream in the Fillmore area suggests that expansion of the breeding population into the RMDP/SCP project area could occur. Because of the extensive proposed riparian habitat mitigation, the proposed RMDP/SCP project would not preclude the expansion of the breeding population onto the RMDP/SCP project area.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Unarmored Threespine Stickleback (FE, CE, CFP). Unarmored threespine stickleback populations exist in five California counties: Los Angeles, San Bernardino, San Diego, San Luis Obispo, and Ventura (CDFG 2005). Surveys for the unarmored threespine stickleback over several years have documented the species within the Santa Clara River portion of the RMDP/SCP project area. The unarmored threespine stickleback is confined to perennial aquatic habitat in the Santa Clara River, which comprises a small portion of the wetland/riparian habitat in the River and has high temporal variability. The proposed RMDP/SCP project area is within the Del Valle Zone of the designated essential habitat for this species (**Figure 4.4-27, Habitat in RMDP/SCP for Unarmored Threespine Stickleback**) (USFWS 1985).[27] The species is known in two other areas of the SCRW that are also designated as essential habitat: San Francisquito Creek and Soledad Canyon.

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27 "Essential habitat" is a term that appears in the USFWS' 1985 Unarmored Threespine Stickleback Recovery Plan (Revised). It coincides with the area proposed in 1980 as unarmored threespine stickleback critical habitat. (USFWS 1985, p. 7.) In 2002, USFWS determined that the 1980 proposed designation of unarmored threespine stickleback critical habitat should not be made final. (67 FR 58580) As a result, the term "essential habitat" lacks any regulatory significance.

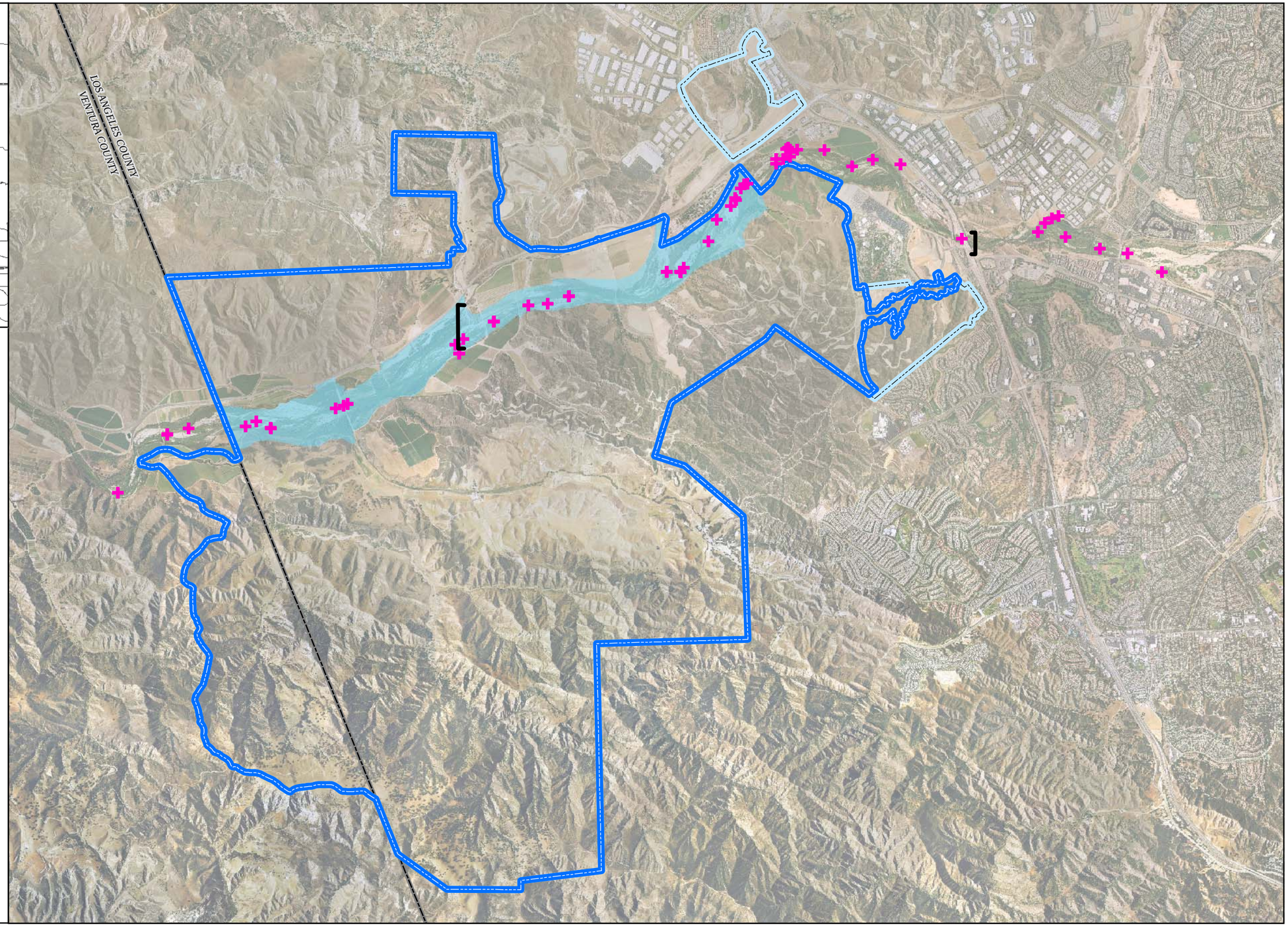
On November 17, 1980, the USFWS proposed designating approximately 51 kilometers (31.7 miles) of streams in Los Angeles and Santa Barbara counties as critical habitat for the unarmored threespine stickleback (45 FR 76012). However, on September 17, 2002, the USFWS determined that a designation of critical habitat for unarmored threespine stickleback should not be made (67 FR 58850-58582), a determination that was upheld by the Ninth Circuit Court of Appeals in 2006 (*Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.* (9th Cir. 2006) 450 F.3d 930).

The Unarmored Threespine Stickleback Recovery Plan (Revised) was published by the USFWS on December 26, 1985 (USFWS 1985). The Recovery Plan designated three areas as very important for the survival and recovery of the species: (1) two disjunct reaches of the Santa Clara River in Los Angeles County; (2) a short reach of San Francisquito Canyon; and (3) and the lowermost 8.4 miles in San Antonio Creek in Santa Barbara County. One of the reaches in the Santa Clara River is the area from San Martinez Grande Canyon upstream to the I-5 bridge, which runs through the proposed RMDP/SCP project site and is the same area proposed but later rejected as critical habitat (45 FR 76012, 67 FR 58850-58582).

Thirteen federal biological opinions were issued for the unarmored threespine stickleback between 1993 and 2006 in the SCRW (**Table 4.4-20**). The CDFG has recently issued three take authorizations for other species in the general regional vicinity of the proposed RMDP/SCP project, which authorizations also discussed, but did not authorize take of, unarmored threespine stickleback (**Table 4.4-21**).

Because the unarmored threespine stickleback is confined to perennial aquatic habitat in the Santa Clara River that is subject to high temporal variability, suitable aquatic habitat was not quantified for the purpose of the impact analysis in this EIR. ENTRIX (2009) concluded that no long-term, permanent significant effects on unarmored threespine stickleback habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan, VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. Further, there would be no impacts to unarmored threespine stickleback habitat resulting from impacts to tributaries to the Santa Clara River, due to the absence of unarmored threespine stickleback, perennial flows, and poor aquatic habitat quality. None of the tributaries have surface water connectivity with the Santa Clara River, except for Middle and Potrero canyons, which have substantial blockages (bedrock headcuts or cascades) that are impassable to fish (ENTRIX 2009).

Some temporary impacts to habitat would occur when construction occurs directly in aquatic habitat, such as the active stream channel. Bridge construction in particular could directly affect aquatic habitat occupied by unarmored threespine stickleback through direct impacts to the flowing stream, stream diversion, and dewatering when construction is occurring within the River corridor. However, such temporary impacts would not contribute to a potential significant cumulative effect of projects in the SCRW.



Legend

- RMDP Boundary
- SCP Boundary
- County Boundary
- River Corridor SMA
- Unarmored Threespine Stickleback Locations
- [ ] Current USFWS Del Valle Stickleback Essential Habitat From Draft Recovery Plan

0 0.25 0.5 1 Miles

APPROXIMATE SCALE IN MILES

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-27

Landmark Village EIR

DUDEK

Habitat in RMDP/SCP for Unarmored Threespine Stickleback

Construction-related impacts on individuals (including adults and juveniles), if not mitigated, could result in a cumulatively considerable contribution to a potential significant cumulative impact in the SCRW because of the local nature and vulnerability of this species in the Santa Clara River. However, the Newhall Ranch Specific Plan Program EIR mitigation measures, as well as the mitigation measures recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**), would reduce such impacts to less than significant. These measures include pre-construction surveys for any construction activity within 300 feet of river habitat to assure that stickleback are avoided or excluded, particularly during the sensitive periods such as spawning or when juvenile fish (fry) are present. These measures also specify the methods to be used for excluded stickleback, as well as how temporary diversion channels would be constructed to assure that adequate rearing habitat is present for stickleback during construction. These measures also employ provisions for constructing permanent and temporary stream crossings in the Santa Clara River in a manner that would allow for unimpeded movement upstream and downstream. Numerous water quality measures, such as construction stormwater BMPs (*e.g.*, silt fencing, erosion control materials, sediment basins) and the installation of water quality treatment facilities are also included to minimize impacts from pollutants related to storm runoff during storm events.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including potential physical changes in the River; altered base and flood flows; biochemical, substrate, and temperature alterations; vegetative changes (*e.g.*, invasive plant species); increased human activity; impacts from pet, stray, and feral animals; and increased predation by exotic predators. Mitigation measures implemented to reduce these potential secondary impacts include protection and management of the River Corridor SMA/SEA 23; creation of buffer areas between the River Corridor SMA/SEA 23 and development, water quality requirements; restrictions on public access; controls on pet, stray and feral animals; and control on invasive predators such as bullfrog and African clawed frog. Mitigation measures related to hydrology and water quality will also ensure that potential impacts to any downstream populations of the unarmored threespine stickleback are not significant.

No long-term, permanent significant effects on unarmored threespine stickleback habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan, VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. No loss of unarmored threespine stickleback individuals would occur. Potential long-term secondary impacts would be mitigated to a less-than-significant level on site.

For the reasons set forth above, contribution of the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a

potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Western Yellow-Billed Cuckoo (CE). The western yellow-billed cuckoo has occasionally been documented within the Santa Clara River corridor during surveys conducted from 1988 to 2007, although the locations of these observations were not mapped. This species has been observed historically in 1979, 1981, and 1992 (Labinger *et al.* 1997); however, no observations of nesting, paired, or territorial western yellow-billed cuckoos have been documented within the proposed RMDP/SCP project area. Currently, the proposed RMDP/SCP project area appears to be a migratory stop for individual western yellow-billed cuckoos but may also be used for post-migratory movements. For breeding, this species primarily uses large blocks of riparian habitat, particularly cottonwood-willow riparian woodlands (66 FR 38611-38626). Large blocks of riparian habitat suitable for western yellow-billed cuckoo generally are absent from the Santa Clara River within the RMDP/SCP project area, and likely elsewhere along the River corridor.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 25,000 acres of riparian habitat in the SCRW. However, not all 25,000 acres support western yellow-billed cuckoos or could be reasonably expected to support them. This species appears to be rare in the SCRW, based on the lack of documented nesting, although it probably migrates through the area on occasion. Also, as noted above, this species typically nests in large blocks of riparian habitat that are probably uncommon in the watershed.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 1,030 acres of 25,000 acres of riparian habitat within the watershed; however, the proportion of potential western yellow-billed cuckoo habitat that could be impacted by development is probably substantially higher because most potential habitat is probably in the Santa Clara River and the larger tributaries where development pressure is higher. Smaller and more remote drainages that support riparian habitat, but which is less likely to be occupied by the vireo, probably are under less development pressure. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be potential significant cumulative impact on potential habitat for the western yellow-billed cuckoo. The contribution of the proposed RMDP/SCP, including Landmark Village project, to this potential significant cumulative impact is 230 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including nest parasitism by cowbirds; traffic noise; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and

predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for the western yellow-billed cuckoo could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures that would protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to the western yellow-billed cuckoo (**Subsection 4.4.10, Project Mitigation Measures**). This mitigation would result in the preservation and management of at least 332 acres of suitable habitat, primarily in the River Corridor SMA/SEA 23, that would be available for migrating individuals and a breeding population of the western yellow-billed cuckoo. These mitigation measures also include restoration, and enhancement of riparian and wetland habitat. Specific measures to reduce potential secondary impacts include controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (*i.e.*, NPDES and section 401 permits), lighting controls, pesticides controls, and cowbird trapping.

In addition to the measures described above, which reduce RMDP/SCP project-related impacts, this species has not been observed to breed in the RMDP/SCP project area but is known to use the RMDP/SCP project area as a migratory stop-over. Most of the recorded breeding populations of this species occur well outside of the watershed. Typical nesting habitat (structure of riparian canopy, proximity to disturbance, *etc*.) associated with this species does not occur within the RMDP/SCP project area.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

White-Tailed Kite (CFP). Bird surveys have been conducted in the riparian areas of the Santa Clara River and Castaic Creek from 1988 through 2007. During these surveys, the white-tailed kite has been observed primarily along the Santa Clara River, where it nests in associated riparian woodlands and forages in adjacent grasslands, open sage scrub, and agricultural fields (**Figure 4.4-28, RMDP/SCP White-Tailed Kite Occurrences**). It is assumed for this cumulative analysis that the white-tailed kite could occur throughout the Santa Clara River corridor, as well as other areas in the SCRW in riparian and woodland habitats associated with upland foraging areas, including agriculture, California annual grassland, and coastal scrub, and other scrub habitats.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 282,000 acres of suitable nesting and foraging habitat for the white-tailed kite (riparian, oak woodland, California annual grassland, agriculture, disturbed land, and coastal scrub habitats), although it would be incorrect to conclude that white-tailed kites actually use all 282,000 acres. White-tailed kites tend to forage in areas that are in proximity to nesting and roosting habitat (riparian and woodland habitat). For example, within the RMDP/SCP project area, most of the observations of foraging white-tailed kites are along the Santa Clara River Corridor (**Figure 4.4-28, RMDP/SCP White-tailed Kite Occurrences**). Based on observations within the RMDP/SCP project area, the kite is most likely to nest and forage along the Santa Clara River and adjacent uplands.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 25,400 acres of 282,000 acres of suitable nesting and foraging habitat for the white-tailed kite. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of habitat in the SCRW could be a potential significant impact on suitable nesting and foraging habitat for the white-tailed kite. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 5,130 acres, which would be cumulatively considerably, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including nest predation; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by both the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would establish a large, managed open space system that would protect white-tailed kite habitat and reduce the effects of long-term secondary impacts. Approximately 4,421 acres of suitable habitat for this species, including 1,546 acres of nesting habitat and 2,875 acres of foraging habitat (*i.e.*, foraging habitat within 0.5 mile of suitable nesting habitat) would be conserved in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area.

Legend

- RMDP Boundary
- SCP Boundary
- County Boundary
- White-Tailed Kite (hunting, flying, or perched)
- White-Tailed Kite Nest

Miles
0 0.25 0.5 1

APPROXIMATE SCALE IN MILES

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-28

DUDEK

Landmark Village EIR

RMDP/SCP White-Tailed Kite Occurrences

Long-term secondary impacts would be avoided and reduced through a variety of mitigation measures. Lighting restrictions along the perimeter of natural areas would help reduce predation of nest sites by predators and reduce behavioral disturbances and physiological stress. Limited recreational usage and access restrictions within the High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect white-tailed kites by allowing them to nest and forage without disturbance. Controls on pesticides would reduce the chance of direct and secondary poisoning, and loss of prey. Provision of a large, relatively undisturbed open space system providing nesting and foraging habitat away from development areas also would help mitigate for increased collisions with vehicles and man-made structures.

In addition to the measures described above, which would reduce the RMDP/SCP project-related impacts, the proposed RMDP/SCP project would not preclude the continued foraging and nesting by white-tailed kite along the Santa Clara River and within the preserved High Country SMA/SEA 20 and Salt Creek area within the RMDP/SCP project area, as well as along the Santa Clara River corridor upstream and downstream of the RMDP/SCP project area.

For the reasons set forth above, the proposed RMDP/SCP, Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

(b) California Species of Special Concern (CSC)

This section addresses cumulative impacts to the CSC species as organized by the different wildlife guilds.

Mollusk. The mollusk guild includes one species: the undescribed species of snail. This species is not currently a CSC, but is assumed to meet the criteria for the designation for the purpose of this analysis. This undescribed species is known to occur only in the Middle Canyon Spring in the RMDP/SCP project area and is not documented to occur elsewhere in the SCRW. Therefore, there would be no other known impacts to this species by other projects in Los Angeles and Ventura counties and, therefore, there would be no cumulative impacts.

Reptile – Low Mobility. This guild includes coast horned lizard, coast patch-nosed snake, and silvery legless lizard. In addition to the RMDP/SCP project area, occurrences of the coast horned lizard in the SCWR include along the Santa Clara River in Oxnard to Soledad Canyon in the east, Saugus, Fillmore, Castaic Lake area and near Sespe Creek. Outside of the RMDP/SCP project area, there are a few

documented occurrences of the silvery legless lizard at the eastern edge of SCRW in the Leona Valley area near Lancaster and Palmdale. These two species are expected to occur throughout the watershed in suitable habitat. There are no CNDDB occurrences reported in Los Angeles or Ventura counties for the coast patch-nosed snake, but this species is expected to occur uncommonly in suitable habitat in the SCRW.

As a group, these species use a broad variety of shrubland (scrub and chaparral), grassland, riparian, and woodland habitats, although each species is expected to primarily use a smaller subset of habitats. For example, coast horned lizard is primarily a grassland and shrubland species, the coast patch-nosed snake a shrubland species, and the silvery legless lizard a riparian and woodland species, but each could potentially occur in any of these habitat types. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 777,000 acres of suitable habitat for the coast horned lizard, coast patch-nosed snake, and silvery legless as a combined group. However, it is not expected that all 777,000 acres are occupied by these species. For example, silvery legless lizards typically are only found in loose soils, coast horned lizard occur in association with native ant colonies that are its primary prey, and coast patch-nosed snakes appear to uncommon and sparsely distributed.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 35,000 acres of 800,000 acres of suitable habitat for the coast horned lizard, coast patch-nosed snake, and silvery legless lizard. With the estimated permanent loss of more than 35,000 acres of habitat and without accounting for past, present or reasonably foreseeable mitigation (particularly for upland habitats used by this guild), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 3,380 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects to these species, including habitat fragmentation and isolation of some local populations, making the species more vulnerable to extirpation from smaller habitat patches. In addition, the close proximity of urban development to suitable habitat for these species could result in disruption of essential behavioral activities (*e.g.*, foraging, reproduction) and greater vulnerability to several potential secondary impacts, including human-caused habitat degradation (*e.g.*, trampling of vegetation and introduction of invasive species, such as Argentine ants (primarily affecting coast horned lizard), or off-road vehicles); harassment and collection; predation by pet, stray, and feral cats and dogs; increased roadkill; and use of pesticides, which may reduce its prey or cause secondary poisoning.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would result in a large, permanent open space system that would provide substantial suitable habitat to support the these species (approximately 5,687 acres for coast horned lizard, 3,724 acres for coast patch-nosed snake, and 6,058 acres for silvery legless lizard) in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection, restoration and enhancement, and management of suitable habitat in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.4-29**). Restoration and enhancement of habitat used by the coast horned lizard, coast patch-nosed snake, and silvery legless lizard in these areas would improve habitat quality for these species.

Several specific mitigation measures also would be implemented to reduce long-term secondary effects due to human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats be monitored and controlled to the extent feasible. Implementation of these measures would allow these species to persist on site in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Reptile and Amphibian – Semi-Aquatic. This guild includes south coast garter snake, southwestern pond turtle, two-striped garter snake, and western spadefoot toad. No south coast garter snakes have been documented in the RMDP/SCP project area, but there are documented occurrences of south coast garter snake within the Santa Clara River downstream of the RMDP/SCP project area. In addition to the RMDP/SCP project area, southwestern pond turtle has been documented in various locations throughout the SCRW (specific locations are suppressed in the CNDDB database in order to protect populations), including the Los Padres and Angeles National Forests, and it is expected to occur wherever habitat conditions are suitable. The two-striped garter snake has been documented throughout the SCRW

outside the RMDP/SCP project area, including Maple Creek north of Fillmore, south of Fillmore, Sespe Creek, Tar Creek upstream of Sespe Creek, Castaic Creek and Fish Canyon, the Santa Clara River between Salt Creek and Summer Four Crossings, Oak Spring Canyon east of Santa Clarita, and Soledad Canyon. This species is expected to occur wherever habitat conditions are suitable. The western spadefoot toad has been documented in several locations in the SCRW, including Cruzan Mesa north of the City of Santa Clarita, west of Sand Canyon south of Santa Clarita, San Francisquito Creek, Soledad Canyon, Plum Canyon Creek, Grasshopper Canyon northwest of Castaic Lake, just east of Oak Spring Canyon south of the Santa Clara River, and north of Tapia Canyon.

The cumulative impacts analysis for habitat impacts presented above for the California red-legged frog presented above generally is applicable to the south coast garter snake, southwestern pond turtle, two-striped garter snake, and western spadefoot toad. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 25,000 acres of riparian habitat in the SCRW, but not all of this habitat is expected to be occupied due to a lack of all necessary habitat elements. Upland habitats adjacent to occupied riparian habitat are expected to be used for important aspects of theses species' life histories, including aestivation, hibernation, and nesting, but the acreage of these areas cannot be accurately estimated at the watershed scale.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 1,030 acres of the 25,000 acres of riparian habitat. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW potentially could be a potential significant cumulative impact on potential habitat for south coast garter snake, southwestern pond turtle, two-striped garter snake, and western spadefoot toad. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 230 acres, which could be cumulatively considerable, absent mitigation. The proposed RMDP/SCP project, including Landmark Village also would cause permanent loss of adjacent terrestrial habitat, such as agriculture along the Santa Clara River, that is probably used by these species for aspects of their life cycles, as well as refuge from severe flood events. It is assumed that other present and reasonably foreseeable projects affecting suitable riparian habitat would also impact adjacent upland habitat, resulting in a potential significant cumulative impact, without accounting for mitigation. The contribution of the proposed RMDP/SCP, including Landmark Village project, to this potential significant cumulative impact to terrestrial habitat could be cumulatively considerable, absent mitigation.

Legend

- RMDP Boundary
- SCP Boundary
- County Boundary

Open Space

- Open Space Man-Made
- Open Space Natural
- Open Space Recreation
- Open Space Restoration
- Spineflower Preserves

0 0.25 0.5 1 Miles

APPROXIMATE SCALE IN MILES

AERIAL SOURCE: DigitalGlobe, 2007

FIGURE 4.4-29

Landmark Village EIR

RMDP Study Area

DUDEK

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project and Landmark Village, also could result in potential long-term secondary effects to these species, including disruption of nocturnal activities and greater vulnerability to predation by nocturnal predators (such as owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators (see Crooks and Soulé 1999); collecting by children; degradation of habitat from increased human use (*e.g.*, trampling, trash, and off-road vehicles) and altered fire regimes (likely too frequent fire); invasion by exotic plant (*e.g.*, giant reed, tamarisk, and pampas grass) and wildlife species (*e.g.*, Argentine ants, bullfrogs, African clawed frogs, exotic fish, and crayfish); use of pesticides; and increased risk of roadkill on roads adjacent to occupied areas. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative secondary impact could be cumulatively considerable, absent mitigation.

As discussed previously for the California red-legged frog, the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection 4.4.10, Project Mitigation Measures**) include extensive mitigation measures that would protect riparian habitat and establish a large, managed open space system which would reduce impacts to these species. Also, the Santa Clara River corridor hydrology and habitat conditions on site or downstream would not be significantly affected by the proposed RMDP/SCP project (PACE 2008**,** Recirculated Draft EIR**, Appendix 4.4**). Upland refugia would be available along the Santa Clara River, although under the proposed RMDP/SCP project, construction of Potrero Bridge under Alternative 2 at the mouth of Potrero Canyon would block access to Potrero Canyon by southwestern pond turtle. This was considered a significant unavoidable impact under the RMDP/SCP Alternative 2 at the project level because this area may be an important refuge and nesting area; however, the Landmark Village project does not contribute to this condition.

The River Corridor SMA/SEA 23 would provide a large, protected open space area that would help offset long-term secondary impacts. Several specific mitigation measures also would be implemented to control human activities in the River Corridor SMA/SEA 23, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting along the open space-urban interface would be downcast. Pesticides would be controlled through an integrated pest management (IPM) plan. Argentine ant invasions of upland habitats in the open space system would be monitored and controlled to the extent feasible. Implementation of these measures would allow these species to persist on site after development.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed (with the exception

of the south coast garter snake), and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Fish. This guild includes arroyo chub and Santa Ana sucker, which primarily occur in the Santa Clara River some of its main tributaries within the SCRW. The cumulative analysis presented above for the unarmored threespine stickleback is, therefore, applied to these species.

Both species are considered be introduced to the Santa Clara River and associated tributaries. In addition to populations in the RMDP/SCP project area, introduced populations of arroyo chub are present in the Santa Clara River at Agua Dulce Creek and west of Chambersburg Road south of Fillmore, and in Soledad Canyon, Santa Paula Creek, and Sespe Creek along SR-33 and at the Stone Corral Creek confluence. In addition to populations in the RMDP/SCP project area, introduced populations of the Santa Ana sucker are present in the Santa Clara River ranging from Arrastre Canyon approximately 2.5 miles east of SR-14 to Santa Paula Creek, and Piru Creek, Sespe Creek, and San Francisquito Creek (Swift *et al.* 1993; Stephenson and Calcarone 1999; NEA 2004; NatureServe 2007).

ENTRIX (2009) concluded that no long-term, permanent significant effects on arroyo chub and Santa Ana sucker habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan, VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. Further, there would be no impacts to habitat for these species resulting from impacts to tributaries to the Santa Clara River, due to the absence of perennial flows, and poor aquatic habitat quality. For these reasons, the proposed RMDP/SCP, including the Landmark Village project, would not contribute to potential significant cumulative impacts to such habitat.

Some temporary impacts to habitat for these species would occur when construction occurs directly in aquatic habitat. Impacts to the active stream channel during bridge construction could affect stream flows, and cause stream diversions and dewatering when construction is occurring within the River Corridor/SMA 23. However, such temporary impacts would not contribute to a potential significant cumulative effect of projects in the SCRW.

Construction-related impacts on individuals, if not mitigated, could result in a cumulatively considerable contribution to a potential significant cumulative impact in the SCRW because of the local nature and potential vulnerability of these species in the Santa Clara River. However, the Newhall Ranch Specific

Plan Program EIR mitigation measures, as well as the mitigation measures recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**), would reduce such impacts to less than significant. These measures include facilities design requirements, pre-development surveys, consultation with USFWS, biological monitoring during construction, excluding fish from disturbance areas through coordination with and approval from the Corps and CDFG, and conformance with state and federal permits related to wetlands and water quality.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including potential physical changes in the River; altered base and flood flows; biochemical, substrate, and temperature alterations; vegetative changes (*e.g.*, invasive plant species); increased human activity; impacts from pet, stray, and feral animals; and increased predation by exotic predators. Mitigation measures implemented to reduce these potential secondary impacts include protection and management of the River Corridor SMA/SEA 23; creation of buffer areas between the River Corridor SMA/SEA 23 and development, water quality requirements; restrictions on public access; controls on pet, stray and feral animals; and control on invasive predators such as bullfrog and African clawed frog. Mitigation measures related to hydrology and water quality also would ensure that potential impacts to any downstream populations of arroyo chub and Santa Ana sucker are not significant.

No long-term, permanent significant effects on arroyo chub and Santa Ana sucker habitat would occur as a result of implementation of the RMDP and buildout of the Specific Plan, VCC, and Entrada planning areas, because the general morphology of the Santa Clara River, adjacent rearing habitat, and high-flow riparian refugia would not be substantially altered. Potential short-term and long-term secondary impacts would be mitigated to a less-than-significant level.

For the reasons set forth above, the contribution of the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird – Raptor. This guild includes long-eared owl, northern harrier, short-eared owl, and western burrowing owl. There are no CNDDB documented occurrences for long-eared owl, northern harrier, or the short-eared owl in the SCRW, but based on data for the proposed RMDP/SCP project these species are expected to occur in suitable habitat in the watershed. The long-eared owl was observed in the RMDP/SCP project area on one occasion (Dudek and Associates 2006) and, therefore, is considered to be at least a regular migrant and/or a winter visitor to the region, with some potential to breed in the

riparian and woodland habitats watershed. The northern harrier has been observed in or near the RMDP/SCP project area infrequently during the 20 years of surveys. Most of the observations of this species were probably of wintering and migrating individuals, and these surveys are considered adequate to establish that this species is at least an occasional winter migrant in the SCRW. The short-eared owl was observed twice near the RMDP/SCP project area (Dudek and Associates 2006; Olson 2007) two observations and it is assumed for the purpose of this analysis that the short-eared owl at least occurs in the SCRW as an occasional migrant and uses watershed for foraging. In addition to two observations of the burrowing owl in the RMDP/SCP project area (Babcock 2007; Miller 2007), there are two other documented occurrences of western burrowing owl in the CNDDB. The majority of documented occurrences of burrowing owl in Los Angeles County are from the Antelope Valley in the Lancaster and Palmdale areas. It is assumed for the cumulative analysis that the burrowing owl occasionally uses SCRW for wintering or during migration, but also has potential to breed in the watershed.

These species overlap in their use of foraging habitats, with grasslands, agriculture, and disturbed lands as the most common foraging habitats used by all of the species, and which are the basis for this analysis at the guild level. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 78,000 acres of suitable foraging habitat these species, although based on the few observations of these species in the watershed, not all of this habitat is expected to be used for foraging. Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 3,790 acres of 78,000 acres of foraging habitat for these species. Without accounting for past, present or reasonably foreseeable mitigation (there are no standard mitigation requirements for loss of grassland, agriculture, or disturbed lands), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 3,790 acres of habitat in the SCRW could be a potential significant impact on suitable foraging habitat for these species. The contribution of the proposed RMDP/SCP project, including the Landmark Village project, to this potential significant cumulative impact is 3,290 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection**

4.4.10, Project Mitigation Measures) would establish a large, managed open space system that includes approximately 995 acres of suitable foraging habitat for these species and which would reduce secondary effects. Implementation of these mitigation measures would result in protection, restoration and enhancement, and management of suitable habitat in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.4-29**). Several specific mitigation measures also would be implemented to reduce long-term secondary effects due to human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides would be controlled through an integrated pest management (IPM) plan.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird – Riparian. This guild includes summer tanager, tricolored blackbird, vermilion flycatcher, yellow-breasted chat, yellow-headed blackbird, and yellow warbler. Documented occurrence data for these species in the SCRW outside of the RMDP/SCP project area are very sparse. There are no documented occurrences in the CNDDB for the SCRW for summer tanager, vermilion flycatcher, tricolored blackbird, or yellow-headed blackbird. No summer tanagers have been observed during spring surveys on site, one vermilion flycatcher has been observed, and occasional yellow-headed blackbirds have been observed. No nesting vermilion flycatchers or yellow-headed blackbirds have been observed in the RMDP/SCP project area. Tricolored blackbird has been observed on site periodically, but were documented nesting on site only in 1994. There is one occurrence each in the CNDDB for yellow-breasted chat and yellow warbler for the watershed approximately three miles east of Fillmore, but these two species have been commonly observed in the Santa Clara River within the RMDP/SCP project area during spring surveys and are assumed to breed on site and elsewhere in the SCRW where there is suitable riparian habitat.

Because these species use habitats similar to those analyzed for the least Bell's vireo and southwestern willow flycatcher/willow flycatcher and would be subject to the same types of secondary impacts, the cumulative impact analysis for the two listed species is applied to the summer tanager, tricolored blackbird, vermilion flycatcher, yellow-breasted chat, yellow-headed blackbird, and yellow warbler.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are

approximately 25,000 acres of riparian habitat in the SCRW. However, not all 25,000 acres support these species or could be reasonably expected to support them. Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 1,030 acres of 25,000 acres of riparian habitat; however, as noted above for least Bell's vireo, these species probably are concentrated along the Santa Clara River and immediately adjacent tributaries, so the proportionate loss of occupied habitat is probably substantially higher. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of riparian habitat, the loss of 1,030 acres of riparian habitat in the SCRW could be a potential significant impact on potential habitat for the species in this guild, including potential migration habitat for the summer tanager, vermilion flycatcher, and yellow-headed blackbird, and nesting habitat for the yellow-breasted chat, yellow warbler, and tricolored blackbird. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 230 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including nest parasitism by cowbirds on yellow-breasted chat and yellow warbler; nighttime illumination; increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. Habitat quality for these species could be reduced by diminished water quality and invasion by exotic plant species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The Newhall Ranch Specific Plan Program EIR and this EIR recommend extensive mitigation measures (**Subsection 4.4.10, Project Mitigation Measures**) that protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to these species. This mitigation would result in the preservation and management of at least 332 acres of riparian habitat, primarily in the River Corridor SMA/SEA 23, that would be available for future breeding populations of yellow-breasted chat and yellow warbler, and potentially tricolored blackbird. These mitigation measures include preservation, restoration, and enhancement of riparian and wetland habitat. Species measures to reduce potential long-term secondary impacts include controls on public access, invasive species controls, conformance with permits from federal and state agencies for impacts to wetlands and water quality (*i.e.*, NPDES and section 401 permits), and lighting controls.

In addition to these measures reducing impacts to these species at the project level, these species generally have broad geographic ranges. The yellow-breasted chat and yellow warbler are expected to

breed along most of the Santa Clara River and associated tributaries wherever there is suitable habitat. The summer tanager, vermilion flycatcher, and yellow-headed blackbird are expected to use suitable habitat within the SCRW on an occasional basis or during migration. The tricolored blackbird is expected to breed occasionally in suitable habitat in the SCRW, but its breeding status in the watershed is unknown and likely to be variable due to its itinerant breeding pattern.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird – Upland Grassland. The only CSC species in this guild is the grasshopper sparrow. This species has not been observed in the RMDP/SCP project area, but because the site is at the edge of its summer breeding range, there is some, albeit low, potential for the species to occur. The CNDDB has one occurrence in SCRW in Tapia Canyon north of Santa Clarita.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 22,000 acres of suitable grassland habitat for the grasshopper sparrow. However, it is not expected that all 22,000 acres are occupied by this species because there is only one documented occurrence in the SCRW and it has not been observed in the RMDP/SCP project area during numerous avian surveys.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of 1,120 acres of 22,000 acres of suitable habitat for the grasshopper sparrow. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this impact is 1,070 acres. Because the grasshopper sparrow has a low potential to winter or nest on site, based on negative surveys findings, at the project level this impact was determined to be adverse but not significant. Since the proposed RMDP/SCP project accounts for the majority of the impact of present and reasonably foreseeable projects, the cumulative effect of the present and reasonably foreseeable projects, including proposed RMDP/SCP project, would not be significant at the watershed level.

Although the species has a low potential to occur in the RMDP/SCP project area and on other present and reasonably foreseeable projects, without accounting for past, present, or reasonably foreseeable mitigation, these projects, including the proposed RMDP/SCP project, could result in potential long-term secondary effects, including habitat fragmentation; abandonment of nests from human activity; greater vulnerability to nocturnal predators as a result of nighttime lighting; noise from roadways; nest parasitism by cowbirds; greater vulnerability to predation by pet, stray, and feral cats and dogs and other mesopredators; and loss of prey or secondary poisoning due to the use of pesticides. Although these

long-term secondary effects could occur, because the grasshopper sparrow is unlikely to nest or winter in the watershed in large numbers, these effects would not have a significant cumulative impact.

Even though significant cumulative impacts to the grasshopper sparrow and its habitat would not occur and mitigation measures are not required, several mitigation measures for other project-level impacts to biological resources would be implemented that would further reduce any potential impacts (**Subsection 4.4.10, Project Mitigation Measures**). These mitigation measures include habitat preservation, restoration, enhancement, and management of the High Country SMA/SEA 20 and Salt Creek area—areas that would form a large, contiguous open space system that includes approximately 660 acres of California annual grassland. Specific measures would also be implemented to reduce potential long-term secondary effects, including controls on human activity, pet, stray, and feral cats and dogs, lighting, and pesticides.

Bird – Upland Scrub and Chaparral. The only CSC species in this guild is the loggerhead shrike. This species is commonly observed in the RMDP/SCP project area and has been documented to nest on site. This species also is likely to be relatively common in scrub and chaparral habitat throughout the SCRW. Although there are no records for this species for the watershed in the CNDDB, this species has been regularly observed by biologists in the watershed.

The loggerhead shrike is considered to be primarily a scrub and chaparral species, but it also frequently forages in grassland, agriculture, and disturbed lands. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 803,000 acres of suitable habitat for the loggerhead shrike. It is not expected that all 803,000 acres are occupied by this species because, although common, shrikes occur in low densities.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 36,700 acres of 803,000 acres of suitable habitat for the loggerhead shrike. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland scrub and chaparral), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 36,700 acres of habitat in the SCRW could be a potential significant impact on the habitat for this species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 5,270 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including habitat fragmentation and reduced nest success due to nighttime lighting; noise disturbance; and harassment/disturbance by humans, especially if such disturbances occur during the nesting season; and predation by pet, stray, and feral cats and dogs as well as other mesopredators.

The use of pesticides to control invertebrates and small mammals within and adjacent to open foraging areas could result in secondary poisoning and loss of prey for the species. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would result in a large, permanent open space system that would provide suitable habitat to support the loggerhead shrike in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection, restoration and enhancement, and management of approximately 6,100 acres of suitable habitat in three main interconnected areas: the River Corridor SMA/SEA 23, the High Country SMA/SEA 20, and the Salt Creek area (**Figure 4.4-29**). This set-aside also would offset long-term secondary impacts, especially habitat fragmentation and vehicle collisions. Several specific mitigation measures also would be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. Pesticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow this species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to loggerhead shrike at the project level, this species remains relatively common and widespread within suitable habitat within the watershed and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bats. This guild includes pallid bat, pocketed free-tailed bat, Townsend's big-eared bat, western mastiff bat, and western red bat. RMDP/SCP project area surveys using the Anabat II Bat Detector documented the presence of pallid bat (including a maternity roost and a night roost in Potrero Canyon), the pocketed free-tailed bat, and western red bat. The western mastiff bat was audibly detected (its signals are directly detectable by humans). Townsend's big-eared bat was not detected during surveys, but has moderate potential to occur on site due to the large amount of suitable habitat. Documented occurrences in the CNDDB elsewhere in the SCRW for these species are variable and some are decades old. The pallid bat has been documented in Soledad Canyon, Castaic, Fillmore, and Santa Paula. The western mastiff bat has

been documented in Piru Creek north of the lake and at the lake, and southwest of Newhall. There are no records in the CNDDB for the pocketed free-tailed bat, Townsend's big-eared bat, or western red bat. However, because comprehensive surveys for bats have not been conducted throughout the SCRW, and because these species are foraging generalists and use a variety of habitats, it is assumed that these species could occur throughout the SCRW. The main limitation for the occurrence of the species probably is a lack of day roosts sites, such as a caves, crevices, rock outcrops, tunnels, *etc*.

This cumulative analysis addresses the loss of foraging habitat for these species. As foraging generalists, they use a variety of habitats, but probably concentrate most of their foraging activity in wetland and riparian habitats. Suitable foraging habitat for bats includes coastal scrub, chaparral, grassland, riparian, oak woodland, agriculture, and disturbed land. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 836,000 acres of suitable foraging habitat for bats in the SCRW. It is not expected that all 836,000 acres are used by bats for foraging because this habitat must be within typical flight distances of day roosts. For example, the pallid bat is capable of flying more than 18 miles, but most foraging occurs within about two miles of the day roost (Hermanson and O'Shea 1983).

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 38,000 acres of 836,000 acres of suitable foraging habitat for these bats. Without accounting for past, present or reasonably foreseeable mitigation (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 38,000 acres of habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 5,590 acres, which could be cumulatively considerable, absent mitigation.

In addition to loss of foraging habitat, day roosts, including maternal roosts, may be present in the SCRW and subject to potential impacts as a result of present and reasonably foreseeable projects. One documented maternal day roost and one night roost for pallid bat would be lost as a result of the proposed RMDP/SCP project, but there is a potential for other roosts sites in the SCRW to be impacted. Without accounting for past, present or reasonably foreseeable mitigation (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of day roosts, the loss of roost sites could result in a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects resulting from increased human activity, noise, and lighting. Use of pesticides for

agriculture or in landscaped areas may result in secondary poisoning and reduction of prey. Pallid bats taking prey on the ground are vulnerable to collection by humans and to predation by pet, stray, and feral cats and dogs. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The cumulative loss of foraging habitat and day roost sites, and long-term secondary impacts to these bats species would be reduced through several mitigation measures included in the Newhall Ranch Specific Plan EIR and recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**). These measures include habitat preservation, restoration, enhancement, and management of approximately 6,300 acres in the River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area—areas that would form a large, contiguous open space system providing foraging and potential roosting habitat for bats. It is expected that the species in this guild would continue to forage in these areas after buildout of the RMDP/SCP project area. Alternative roost sites would be created to mitigate for any day roost sites disturbed during construction, including creation of roosts under bridges and in culverts, where practicable, in consultation with CDFG. Species measures to reduce potential long-term secondary impacts include controls on public access, pet, stray, and feral cat dogs, pesticides, and lighting.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Mammal – Low Mobility. This guild includes the San Diego desert woodrat and southern grasshopper mouse. Within the RMDP/SCP project area, the San Diego desert woodrat is common in coastal scrub and chaparral in the RMDP/SCP project area. The only other documented occurrence in close proximity to the SCRW is in Weldon Canyon just west of the SR-14/I-5 junction. However, this lack of data is probably more a result of few small mammal trapping programs conducted in the watershed and/or under-reporting of the species to the CNDDB. Based on it relatively frequent capture during the Newhall Ranch trapping study (Impact Sciences 2005), this species is expected to be common throughout the watershed in suitable habitat (*i.e.*, more xeric expressions of the coastal scrub and chaparral). The southern grasshopper mouse was not documented on site during the small mammal trapping studies or

pitfall trapping conducted for reptile and amphibians in the RMDP/SCP project area and is only known from Mint Canyon. This record dates back to 1930 and is located approximately 15 miles east of the RMDP/SCP project area. The documented geographic range of the grasshopper mouse is east of the RMDP/SCP project area (Zeiner *et al*. 1990B). The habitat use of these two species overlaps, where both may occur in drier, more open coastal scrub and chaparral, but the San Diego woodrat also occurs in more densely vegetated shrublands that would be unsuitable for the grasshopper mouse and the grasshopper mouse also occurs in grassland that is not used by the woodrat.

The combined habitat for these two species for the purpose of this cumulative analysis is defined as grassland, coastal scrub, and chaparral. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 747,000 acres of potential habitat in the SCRW, of which approximately 725,000 acres are coastal scrub and chaparral and approximately 22,000 acres are non-native grassland. Even though the San Diego desert woodrat is relatively common, it is not expected to occur in all 725,000 acres of coastal scrub and chaparral in the SCRW because it uses more xeric forms of these habitats, whereas the dusky-footed woodrat tends to occur in more mesic forms. The southern grasshopper mouse, if present in the SCRW, is expected to be even more sparsely distributed in xeric forms of coastal scrub and chaparral and grasslands.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 34,100 acres of 747,000 acres of potential habitat, including approximately 33,000 acres of coastal scrub and chaparral and approximately 1,100 acres of grassland. Without accounting for past, present or reasonably foreseeable mitigation for these upland habitats, or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 34,100 acres of habitat in the SCRW could be a potential significant impact on the habitat for both species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 3,050 acres of the combined habitats, including 1,980 acres of coastal scrub and chaparral and 1,070 acres of grassland. The loss of these habitats on site could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including habitat fragmentation and potential isolation of local populations of the San Diego desert woodrat and southern grasshopper mouse, making the species, if present, more vulnerable to local extirpation. In addition, over the long term, the close proximity of urban development to suitable habitat could result in abandonment of dens and burrows; disruption of nocturnal activities; greater vulnerability to predation by nocturnal predators (*e.g*., owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators such as raccoons, foxes, skunks, and opossums (Crooks and Soulé 1999); and vulnerability to pesticides,

which may reduce insect prey and cause secondary poisoning and rodenticides that may be used to control pest rodents. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would result in a large, permanent open space system that would provide suitable habitat to support the San Diego desert woodrat and southern grasshopper mouse, if present in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection and management of approximately 3,488 acres of suitable habitat for the San Diego desert woodrat and approximately 2,657 acres for the southern grasshopper mouse. This open space would be conserved in three main interconnected areas: the River Corridor SMA, the High Country SMA, and the Salt Creek area (**Figure 4.4-29**). This set-aside also would help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures also would be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow these species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to these species at the project level, the San Diego desert woodrat has a broad geographic range and is still common in suitable habitat. It is expected to occur relatively commonly in suitable habitat on National Forest system lands and other public lands on the SCRW. The southern grasshopper mouse, if still present in the SCRW, likely occurs in low population densities in very scattered distributions. The probability of a present or reasonably foreseeable project, including the proposed RMDP/SCP project, impacting this species is considered to be low.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Mammal – Moderate Mobility. This guild includes American badger and San Diego black-tailed jackrabbit. Both species are present, but uncommon within the RMDP/SCP project area. The American

badger has been documented three times in the RMDP/SCP project area through systematic surveys and anecdotal observations of dens and tracks (Impact Sciences 2005; Behrends 2006; Dudek and Associates 2006). There is only one documented occurrence for the American badger outside the RMDP/SCP project area in the CNDDB; a location between Bear Creek and Hopper Mountain northeast of Fillmore. However, while this species generally occurs at low abundances, observations of badgers in suitable habitat in southern California by biologists are not uncommon. It is expected to occur throughout the SCRW in suitable habitat. However, on the Angeles National Forest and other Forest System lands the distribution of American badger is not well documented (Stephenson and Calcarone 1999). This species is known to occur on portions of the Los Padres National Forest but has not been observed on many portions of the Angeles National Forest in several years (Welch 2009). The San Diego black-tailed jackrabbit was only observed in the RMDP/SCP project area during focused mammal surveys by Impact Sciences (2005). Negative findings for this species during many other wildlife surveys suggest that it is uncommon on site. There is only one documented occurrence for the San Diego black-tailed jackrabbit outside the RMDP/SCP project area in the CNDDB: a location between Castaic Lake and San Francisquito Canyon. While this species appears to be uncommon in the western portion of the watershed, it is expected to be more common in the eastern portion of the watershed because several CNDDB occurrences are from the Palmdale/Lancaster desert region just east of SCRWR. The lack of occurrence records for both the American badger and San Diego black-tailed jackrabbit probably are due to both their relatively uncommon occurrence (at least in the central and western portions of the watershed) and under-reporting to the CNDDB.

For the purpose of this cumulative analysis, suitable habitat for these two species includes agriculture, disturbed land, grassland, and coastal scrub. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 252,000 acres of potential habitat in the SCRW. Because both species are uncommon in the SCRW, not all 252,000 acres are expected to be occupied.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 24,300 acres of 251,000 acres of potential habitat for the American badger and San Diego black-tailed jackrabbit. Also, past, present, and reasonably foreseeable future projects within the SCRW have tended to be concentrated in the valleys and relatively gentle foothill slopes where these species are known to occur. These patterns apply both to the land use changes addressed here a cumulative effects (*i.e.*, since the 1999 UCSB GAP project) and extensive land conversions to agricultural uses prior to 1999. These cumulative effects cause a disproportionately high loss of individuals and habitat for badgers and black-tailed jackrabbits whose habitats and distributions are primarily on gentle topography, lower foothills and canyons, or valley bottoms. Without accounting for past, present or reasonably foreseeable mitigation for these upland habitats, or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 24,300 acres of habitat in the

SCRW could be a potential significant impact on the habitat for both species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 4,800 acres of the habitats, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects including habitat fragmentation; increased risk of vehicle collisions as a result of new roads and increased traffic volumes on existing roads (*e.g.*, SR-126); nighttime illumination; increased human activity and potential harassment by humans and pet, stray, and feral cats (primarily San Diego black-tailed jackrabbit) and dogs; and the use of rodenticides that could result in accidental poisoning of both species and reduction of the rodent prey base for the American badger. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would result in a large, permanent open space system that would provide suitable habitat to support the American badger and San Diego black-tailed jackrabbit in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection and management of approximately 3,540 acres of suitable habitat for the American badger and San Diego black-tailed jackrabbit. This open space would be conserved in three main interconnected areas: the River Corridor SMA, the High Country SMA, and the Salt Creek area (**Figure 4.4-29**). This set-aside also would help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures also would be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow these species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to these species at the project level, these species occur in low densities on site, but have broad geographic ranges (*e.g.*, badger occurs virtually throughout the state), are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands, although these species are likely to occur in low densities on Forest Service lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

(c) California Special Animals, Watch List Species, Specially Protected Mammal, and CDFG Trust Resource Species

This section addresses cumulative impacts to California Special Animals, Watch List Species, Specially Protected Mammal, and CDFG Trust Resource Species as organized by the different wildlife guilds.

Insect. This guild includes monarch butterfly and San Emigdio blue butterfly. Individual monarch butterflies have been regularly observed during focused butterfly surveys as well as during various other wildlife and plant surveys, but no wintering sites have been observed or documented in the SCRW. Due to the site's distance from the coast, it is unlikely that the RMDP/SCP project area would be used by large numbers of overwintering adult monarch butterflies (Compliance Biology 2004). Monarch butterflies themselves have no special conservation status, but their overwintering sites are considered a sensitive resource (CDFG 2008B). Because winter sites do not occur in the RMDP/SCP project area, including Landmark Village, there would be no impacts resulting from the proposed RMDP/SCP project and no cumulative effects of the proposed RMDP/SCP project, including Landmark Village, on Monarch butterflies' overwintering habitat.

One San Emigdio blue butterfly was also observed in the High Country SMA at the northwestern edge of Salt Creek Canyon during the 2005 surveys. The CNDDB reports no known locations within the SCRW but Stephenson and Calcarone (1999) cite two occurrences within the SCRW, at Mint Canyon and Bouquet Canyon near Castaic. The primary location for this species is along the Mojave River near Victorville, with scattered locations in canyons along the north side of the San Gabriel Mountains near the desert's edge, and in arid areas south of Mount Abel near San Emigdio Mesa (Emmel and Emmel 1973; Murphy 1990).

Although the San Emigdio blue butterfly's geographic range is relatively large and its larval host plants (quail brush and four-winged saltbush) are common, it is a "habitat specialist," meaning that its distribution is much more localized than its host plants. It is known from only a few scattered locations range-wide. Quail brush and four-winged saltbush have wide elevational ranges, but the mixed saltbush scrub vegetation where San Emigdio blue butterfly is found generally occurs on bajadas, flats, lower slopes, playas, and valley floors (Sawyer and Keeler-Wolf 1995), where development and other land use conversions tend to be concentrated. The best-known location is outside the SCRW, along the Mojave

River at the Interstate 15 crossing, near Victorville. That occurrence has declined due to surrounding urbanization (Stephenson and Calcarone 1999).

Details of the San Emigdio blue butterfly's population status at SCRW occurrences at Bouquet and Mint canyons are unknown. Due to its occurrence in small, widely scattered locations; its susceptibility to habitat loss; and the lack of known occurrences within the SCRW, ongoing development is the watershed could be a potential significant cumulative impact to the San Emigdio blue butterfly.

Vegetation clearing associated with construction of RMDP facilities and fence construction around the Potrero Preserve Area in accordance with the SCP would result in the removal of quail brush plants associated with the colony that occurs outside the Potrero Preserve Area. The construction of Potrero Canyon Road under Alternative 2 would fragment the only known colony on site. Even with replacement, preservation, and management of habitat for this species, as proposed, this impact would be significant and unavoidable, absent further mitigation for Alternative 2. Due to the species' rarity within the SCRW and throughout its known range, and the other conservation issues described above, a significant impact to even a single occurrence would result in a cumulatively considerable contribution to the species in the watershed. Therefore, the RMDP/SCP project-specific impacts of Alternative 2 would be a significant and unavoidable cumulative impact to San Emigdio blue butterfly. However, the Landmark Village project site does not does not include any populations of San Emigdio blue butterfly, or a concentration of its host plant. Therefore, the Landmark Village project would not considerably contribute to cumulative secondary impacts to this species.

Alternatives 3 through 7 of the RMDP/SCP would largely avoid impacts to occupied habitat and unavoidable residual impacts would be reduced to a level less than significant through avoidance measures. Similarly, these alternatives also would not contribute considerably to a potential significant watershed-wide cumulative impact in the SCRW.

Reptile – Low Mobility. This guild includes coastal western whiptail, rosy boa, and San Bernardino ringneck snake.

The coastal western whiptail was observed on site in the High Country SMA (Dudek and Associates 2006) and off site in Castaic Mesa (Compliance Biology 2006), but was not observed in pitfall trapping (Impact Sciences 2006). There is only one other documented occurrence for the SCRW in the CNDDB south of Soledad Canyon Road. However, this species has only been tracked in the CNDDB in recent years, with the oldest occurrence in Ventura and Los Angeles counties dating back to 1993. This species is common observed by biologists in suitable habitat in southern California and it is expected to be relatively common in suitable habitat in the SCRW.

The San Bernardino ringneck snake and rosy boa have not been observed in the RMDP/SCP project area and there are no documented occurrences in the CNDDB for these species. While not commonly observed

by biologists because of their low detectability during typical walkover surveys, both species are still relatively widespread and common in suitable habitat (Zeiner *et al.* 1988). There is substantial suitable habitat for these species in the RMDP/SCP project area and elsewhere in the SCRW and both are expected to occur throughout the SCRW.

These three species overlap in their habitat use, but also may occur in habitats that are not typically used by the other species. For example, rosy boa primarily uses coastal scrub and chaparral, while the coastal western whiptail lizard and San Bernardino ringneck snake both use annual grassland and oak woodlands. Unlike the other two species, the ringneck snake also uses riparian habitats. For the purposes of this cumulative analysis for these species, the collective habitat types include riparian, grassland, coastal scrub, chaparral, and oak woodland. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 777,000 acres of potential habitat in the SCRW. Because all three species probably are patchily distributed in the SCRW in association with suitable microhabitats within these broader habitat areas, not all 777,000 acres are expected to be occupied.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 35,000 acres of 777,000 acres of potential habitat for the coastal western whiptail, rosy boa, and San Bernardino ringneck snake. Without accounting for past, present or reasonably foreseeable mitigation for these habitats (particularly grassland, coastal sage scrub, and chaparral), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 35,000 acres of habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 3,380 acres of the habitats, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including habitat fragmentation and isolation of some local populations of these species, making them more vulnerable to extirpation. In addition, over the long term, the close proximity of urban development to suitable habitat could result in disruption of essential behavioral activities (*e.g.*, foraging, reproduction) and greater vulnerability to several potential secondary impacts, including human-caused habitat degradation (*e.g.*, trampling of vegetation, introduction of invasive species, such as Argentine ants and off-road vehicles); harassment and collection; predation by pet, stray, and feral cats and dogs; increased incidence of roadkill; and use of pesticides, which may reduce their prey or cause secondary poisoning. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The required Newhall Ranch Specific Plan Program EIR mitigation measures and additional mitigation measures recommended by this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would result in a large, permanent open space system that would provide suitable habitat to support coastal western whiptail, rosy boa, and San Bernardino ringneck snake in the RMDP/SCP project vicinity. Implementation of these mitigation measures would result in protection and management of substantial suitable habitat for these species (approximately 5,687 acres for coastal western whiptail, 3,724 acres for rosy boa, and 6,047 acres for San Bernardino ringneck snake) in three main interconnected areas: the River Corridor SMA, the High Country SMA, and the Salt Creek area (**Figure 4.4-29**). This set-aside would also help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures would also be implemented to control human activities in open space areas, including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Implementation of these measures would allow these species to persist on site after development in the large amount of permanent open space that would be protected and managed.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges and are relatively common, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird – Raptor. This guild includes Cooper's hawk, ferruginous hawk, merlin, prairie falcon, sharp-shinned hawk, and turkey vulture. The Cooper's hawk is the only species in this guild that has been documented to nest on site. The others forage on site only during the winter or during migration (ferruginous hawk, merlin, and sharp-shinned hawk) or otherwise are likely to nest off site and use the site only for foraging (prairie falcon and turkey vulture). These species are expected for nest (Cooper's hawk, prairie falcon, and turkey vulture) and/or forage throughout suitable habitat in the watershed.

As a group these species may forage in virtually all the habitats on site, including agriculture, disturbed land, grassland, coastal scrub, chaparral, riparian, and woodland. However, each of the species typically uses some subset of these habitats. For example, ferruginous hawk typically forages over open lands,

such as grassland and agriculture, while Cooper's hawk primarily forages in riparian and woodland habitat and adjacent coastal scrub. Wintering or migrant sharp-shinned hawks may forage in all of the habitats listed above. For the purpose of this analysis, therefore, all of these habitats are considered to be suitable for the Bird – Raptor guild.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 836,000 acres of suitable foraging habitat for these species in the SCRW. It is not expected that all 836,000 acres are used by all members of this guild because of the different foraging habitat preferences of the different species.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 38,000 acres of 836,000 acres of suitable foraging habitat for species in the Bird – Raptor guild. Without accounting for past, present or reasonably foreseeable mitigation for these habitats (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of 38,000 acres of habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 5,590 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including increased human activity; pesticide use resulting in loss of prey and/or secondary poisoning; harassment and predation by pet, stray, and feral cats and dogs; and increased predation by mesopredators. The larger species such as turkey vulture would have increased potential for entanglement with power lines poles, resulting in physical injury or death from electrocution. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would establish a large, managed open space system that includes substantial foraging habitat for these species, including 1,609 acres for Cooper's hawk (includes potential breeding habitat), 2,996 acres for ferruginous hawk, 3,086 acres for merlin, 1,409 acres for prairie falcon, 6,574 acres for sharp-shinned hawk, and 4,267 acres for turkey vulture. This habitat would be set aside in three main interconnected areas: the River Corridor SMA, the High Country SMA, and the Salt Creek area (**Figure 4.4-29**). This set-aside would also help mitigate long-term secondary effects by providing adequate protected open space away from the edge of development. Several specific mitigation measures would also be implemented to control human activities in open space areas,

including restrictions on recreational activities and homeowner education. Pet, stray, and feral cats and dogs would be leashed or otherwise controlled in or adjacent to open space areas. All lighting would be downcast away from open space areas. Rodenticides would be controlled through an integrated pest management (IPM) plan. Installation of new or relocation of existing power lines in the High Country SMA and Salt Creek area would be coordinated with CDFG and structures would be designed in accordance with Avian Power Line Interaction Committee (APLIC 2006) guidelines and operated with anti-perching devices to help reduce collisions and electrocutions.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird – Riparian. This guild includes black-crowned night-heron and Nuttall's woodpecker.

The designated sensitive resource for the black-crowned night-heron is roosts or rookery sites, none of which have been documented in the RMDP/SCP project area during the numerous avian surveys conducted in riparian habitats. Because roosts or rookery sites do not occur in the RMDP/SCP project area, there would be no impacts resulting from the proposed RMDP/SCP project and no cumulative effects of the proposed RMDP/SCP project on roosts or rookery sites for this species. Therefore, this species is not addressed further in this analysis.

Nuttall's woodpecker was observed nearly every year in the RMDP/SCP project area during riparian bird spring surveys and is considered to be common in riparian and woodland habitats on site. It is also commonly observed in riparian and woodland habitats elsewhere in southern California during biological surveys. For the purpose of this analysis, Nuttall's woodpecker is considered to be common in suitable habitat throughout the watershed.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 30,000 acres of suitable habitat for Nuttall's woodpecker in the SCRW. It is not expected that all 30,000 acres are used by this species, but because it is relatively common species in suitable habitat, it is likely to have a broad distribution in the watershed.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 1,100 acres of 30,000 acres of suitable habitat for Nuttall's

woodpecker, including the proposed RMDP/SCP project's contribution of 320 acres. Because this species is common and has a widespread distribution within its range, this cumulative impact would be adverse, but not significant.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects including noise; lighting; invasive species, such as giant reed, tamarisk, and Argentine ants; increased human activity; increased predation; and use of pesticides which could reduce prey and cause secondary poisoning. These secondary impacts would not be cumulatively significant because of this species' common occurrence in suitable habitat and widespread distribution.

Although impacts to habitat and secondary effects on Nuttall's woodpecker would not be cumulatively significant, the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR for other special-status riparian birds (**Subsection 4.4.10, Project Mitigation Measures**) would protect riparian habitat and establish a large, managed open space system, all of which would reduce impacts to this species. This mitigation would result in the preservation and management of approximately 1,629 acres of suitable habitat for Nuttall's woodpecker. This set-aside of lands would also reduce long-term secondary effects. In addition, lighting restrictions along the perimeter of natural areas would help avoid predation of nest sites by nocturnal predators and avoid physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect this species by allowing it to nest and forage without disturbance. Controls on pesticides would reduce the chance of secondary poisoning and loss of prey. Controls on Argentine ants would help reduce impacts on young in nests.

Bird – Upland Scrub and Chaparral. This guild includes Allen's hummingbird, Bell's sage sparrow, black-chinned sparrow, Costa's hummingbird, rufous hummingbird, and southern California rufous-crowned sparrow. The rufous-crowned sparrow is a relatively common breeding resident in the RMDP/SCP project area. The Bell's sage sparrow has not been observed in the RMDP/SCP project area, but two individuals were observed on the adjacent Legacy project site and the species has the potential to nest in small numbers in the RMDP/SCP project area. The Allen's and Costa's hummingbirds are regularly observed in the RMDP/SCP project area and have high potential to nest on site. The rufous hummingbird is regularly observed in the early spring in the RMDP/SCP project area and is assumed to use the site during migration and to not be a breeding resident. The black-chinned sparrow has not been observed in the RMDP/SCP project area and is considered to have a low potential to nest on site. There are no occurrence records in the CNDDB for the SCRW for any of these species, but because most are still relatively common and are often observed by biologists where they occur, the lack of occurrences is

probably due to under-reporting. It is assumed for this analysis that their occurrence in the larger watershed is comparable to their occurrence in the RMDP/SCP project area.

As a group these species forage and nest (if a breeding resident) coastal scrub and/or chaparral throughout their ranges. However, on site, and possibly in the region, the Bell's sage sparrow is expected to occur only in chaparral (Garrett and Dunn 1981). In addition, the Allen's hummingbird, Costa's hummingbird, and rufous hummingbird also commonly forage, and Allen's hummingbird may nest, in riparian and woodland habitats. Therefore, for these three species the riparian and woodland habitats are included in this analysis.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 725,000 acres of suitable coastal scrub and chaparral habitat for black-chinned sparrow and Bell's sage sparrow and 755,000 acres of suitable coastal scrub, chaparral, riparian, and woodland habitat for Allen's hummingbird, Costa's hummingbird, and rufous hummingbird in the SCRW. It is not expected that all of these acreages are used by all of these species. Based on the RMDP/SCP project area occurrences, the southern California rufous-crowned sparrow and the hummingbirds may be fairly common elsewhere in the SCRW, but the black-chinned sparrow and Bell's sage sparrow probably are much less common.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 33,000 acres of 725,000 acres of coastal scrub and chaparral for black-chinned sparrow and Bell's sage sparrow and approximately 34,000 acres of 755,000 acres of coastal scrub, chaparral, riparian, and woodland habitat Allen's hummingbird, Costa's hummingbird, and rufous hummingbird. Without accounting for past, present or reasonably foreseeable mitigation (particularly for upland scrub and chaparral), or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of this habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to the impact on coastal scrub and chaparral is 1,980 acres. The proposed RMDP/SCP project's contribution to the impact on coastal scrub, chaparral, riparian, and woodland habitat is 2,300 acres. These contributions to the overall potential significant cumulative impact in the SCRW could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects including noise; lighting; invasive plant species and Argentine ants (increasing mortality of young of breeding residents); increased human activity; increased predation; and use of pesticides which could reduce prey and cause secondary poisoning. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed

RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would protect suitable habitat for these species and establish a large, managed open space system. The open space system would include approximately 3,487 acres of coastal scrub and chaparral for the black-chinned sparrow, 1,488 acres of chaparral for Bell's sage sparrow, and approximately 3,860 acres of coastal scrub, chaparral, riparian, and woodland habitat for the hummingbirds. This set-aside of lands would also reduce long-term secondary effects. In addition, for breeding residents lighting restrictions along the perimeter of natural areas would help to reduce predation of nest sites by nocturnal predators and reduce physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect these species by allowing them to nest and forage without disturbance. Controls on pesticides would reduce the chance of secondary poisoning and loss of prey. Controls on Argentine ants would help reduce impacts on young in nests.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Bird – Upland Grassland. This guild includes only California horned lark. This species is commonly observed on site within the Santa Clara River and adjacent agricultural fields. Although this species has not been documented to nest on site, due the presence of suitable nesting habitat, it is assumed that California horned lark could nest on site. Based in frequent observations of this species in the RMDP/SCP project area and because it is commonly observed by biologists elsewhere in southern California, it is assumed that the California horned lark commonly occurs in suitable habitat in the SCRW, including annual and native grassland, agriculture, and disturbed land.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 78,000 acres of suitable in the SCRW for California horned lark. It is not expected that all 78,000 acres are used by this species, but it is common enough and has broad enough habitat preferences,

that it could occur almost anywhere in these habitats where there is available insect prey, such as freshly disced fields.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 3,790 acres of 78,000 acres of suitable habitat for the California horned lark, of which the contribution of the proposed RMDP/SCP, including the Landmark Village project, is 3,290 acres. This is considered an adverse but not significant cumulative impact to this species because it is still common and widespread within its range and uses a variety of habitats.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, could result in potential long-term secondary effects, including habitat fragmentation; abandonment of nests from human activity; greater vulnerability to nocturnal predators as a result of nighttime lighting; noise from roadways; nest parasitism by cowbirds; greater vulnerability to predation by pet, stray, and feral cats and dogs and other mesopredators; and loss of prey or secondary poisoning due to the use of pesticides. Although these effects could occur, substantial relatively undisturbed winter foraging habitat would remain in the SCRW, which would allow the California horned lark to avoid many of these effects. Secondary effects to wintering birds would be adverse but not significant. Also, this species has not been documented to nest in the RMDP/SCP project area, and if it did, the nesting population probably would be small. Therefore, cumulative secondary impacts to nesting birds, such as cowbird parasitism, would be adverse but not significant.

Even though impacts to the California horned lark and its habitat would not be cumulatively significant and mitigation measures are not required, the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**) for other project-level impacts to biological resources would be implemented that would further reduce any potential impacts. These mitigation measures also include habitat preservation, restoration, enhancement, and management of the High Country SMA and Salt Creek area—areas that would form a large, contiguous open space system that includes 995 acres of California annual grassland, agriculture, and disturbed land. This set-aside of lands would also reduce potential long-term secondary effects. In addition, for breeding residents lighting restrictions along the perimeter of natural areas would help to reduce predation of nest sites by nocturnal predators and reduce physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect this species by allowing it to nest and forage without disturbance.

B**ird – Upland Woodland.** This guild includes chipping sparrow, Lawrence's goldfinch, hermit warbler, and oak titmouse. All of these species have been observed in the RMDP/SCP project area and the chipping sparrow, Lawrence's goldfinch, and oak titmouse are considered to be breeding residents. The hermit warbler is considered to be a winter migrant. All of these species are fairly common to abundant in suitable habitat and are commonly observed by biologists during surveys in southern California. Although the primary habitat for these species is upland woodland, they also forage and nest in riparian habitats. Therefore, for the purpose of the cumulative analysis suitable habitat for these species is defined as woodland and riparian.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 30,000 acres of suitable woodland and riparian habitat in the SCRW for these species. It is not expected that all 30,000 acres are used by these species, but because they are still common to abundant within their ranges, and based regular observations of these species in the RMDP/SCP project area, these species area assumed to be fairly common in suitable habitat in the SCRW.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 1,100 acres of 30,000 acres of suitable habitat for these, including the proposed RMDP/SCP project's contribution of 320 acres. Because these species are common and have widespread distributions within their range, and given the presence of substantial riparian and oak woodland vegetation communities within the proposed RMDP/SCP project area, National Forest system lands and other designated open space within the watershed, the cumulative impact would be adverse but not significant.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including habitat fragmentation; abandonment of nests from human activity; greater vulnerability to nocturnal predators as a result of nighttime lighting; noise from roadways; nest parasitism by cowbirds; greater vulnerability to predation by pet, stray, and feral cats and dogs and other mesopredators; and loss of prey or secondary poisoning due to the use of pesticides. Although these effects could occur, substantial undisturbed habitat would remain in the SCRW, which would allow these species to avoid many of these effects. Therefore, cumulative secondary impacts to migrant (hermit warbler) and nesting birds would be adverse but not significant.

Even though impacts to these species and their habitat would not be cumulatively significant and mitigation measures are not required, the mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**) for other project-level impacts to biological resources would be implemented and would further reduce any potential impacts. These mitigation measures include habitat preservation, restoration, enhancement, and

management of the High Country SMA and Salt Creek area—areas that would form a large, contiguous open space system that includes 1,560 acres of riparian and woodland habitat. This set-aside of lands would also reduce potential long-term secondary effects. In addition, for breeding residents lighting restrictions along the perimeter of natural areas would help to reduce predation of nest sites by nocturnal predators and reduce physiological stress. Limited recreational usage and access restrictions within the River Corridor SMA/SEA 23 and High Country SMA/SEA 20; control of pet, stray, and feral cats and dogs in or near open space areas; trail signage; and homeowner education regarding special-status resources in preserved natural habitat areas would help protect these species by allowing them to nest and forage without disturbance.

Bats. This guild includes fringed myotis, long-legged myotis, western small-footed myotis, and Yuma myotis. The presence of the fringed myotis and Yuma myotis were confirmed in the RMDP/SCP project area through acoustic detection (fringed myotis) and capture (Yuma myotis). The presence of long-legged myotis and western small-footed myotis was not confirmed, but bats with acoustic signatures in the 40 kHz range, which is the range for these two species, were detected on site in 2004 and 2006. Therefore, long-legged myotis and western small-footed myotis potentially occur in the RMDP/SCP project area. There are no CNDDB records of these species elsewhere in the SCRW. However, comprehensive surveys for these species have not been conducted throughout the SCRW. Because species are foraging generalists and use a variety of habitats (although the Yuma myotis primarily uses riparian and wetland habitats), it is assumed that these species could occur throughout the SCRW at least in low numbers. The main limitation for the occurrence of these species probably is a lack of day roosts sites, such as a caves, crevices, rock outcrops, tunnels, *etc.*

This cumulative analysis addresses the loss of foraging habitat for these species. As foraging generalists, they use a variety of habitats, but probably concentrate most of their foraging activity in wetland and riparian habitats. Suitable foraging habitat for bats includes coastal scrub, chaparral, grassland, riparian, oak woodland, agriculture, and disturbed land. Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 836,000 acres of suitable foraging habitat for bats in the SCRW. It is not expected that all 836,000 acres are used by these bats for foraging because this habitat must be within typical flight distances of day roosts.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 38,000 acres of 836,000 acres of suitable foraging habitat for these bats. Without accounting for past, present or reasonably foreseeable mitigation, or the RMDP/SCP project's individual contribution to mitigation for loss of habitat, the loss of this habitat in the SCRW could be a potential significant impact on the habitat for these species. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this impact is 5,590 acres, which could be cumulatively considerable, absent mitigation.

In addition to loss of foraging habitat, day roosts, including maternal roosts, may be present in the SCRW and subject to potential impacts as a result of present and reasonably foreseeable projects. Although no day roosts for these species were detected in the RMDP/SCP project area, there is a potential for day roosts sites to be established in the RMDP/SCP project area and to occur elsewhere in the SCRW. Without accounting for past, present or reasonably foreseeable mitigation (particularly upland habitats), or the RMDP/SCP project's individual contribution to mitigation for loss of day roosts, the loss of roost sites could result in a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact, if a day roost were impacted by construction activities, could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects resulting from increased human activity, noise, and lighting. Use of pesticides for agriculture or in landscaped areas may result in secondary poisoning and reduction of prey. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

The cumulative loss of foraging habitat and day roost sites, and long-term secondary impacts to these bats species would be reduced through several mitigation measures required by the Newhall Ranch Specific Plan EIR and recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**). These measures include habitat preservation, restoration, enhancement, and management of approximately 6,300 acres in the River Corridor SMA, High Country SMA, and Salt Creek area—areas that would form a large, contiguous open space system providing foraging and potential roosting habitat for bats. It is expected that the species in this guild would continue to forage in these areas after buildout of the RMDP/SCP project area. Alternative roost sites would be created to mitigate for any day roost sites disturbed during construction, including creation of roosts under bridges and in culverts, where practicable, in consultation with CDFG. Species measures to reduce potential long-term secondary impacts include controls on public access and lighting.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are likely to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; or (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Mammal – High Mobility. This guild includes American black bear, mountain lion, and mule deer. The mountain lion and mule deer are both present in the RMDP/SCP project area. The RMDP/SCP project area supports about 14,300 acres (22 square miles), which is probably not large enough to encompass the entire home range of a mountain lion individual (*e.g.,* mountain home ranges in the Santa Ana Mountains range from about 32 to 86 square miles, with a mean of 43 square miles (Padley 1989, 1996)), but assuming some range overlap of individuals, the RMDP/SCP project area could be included in the home ranges of two or three individuals. Female home ranges are generally much smaller than male ranges and have been documented to range from 20 to 60 square miles (Stephenson and Calcarone 1999). It is also important to note that the size of an individual's home range can vary from season to season and year to year, and is probably dependent on prey density and available stalking cover (Currier 1983). In areas where habitat is limited, population densities can reach 10 adults per 100 square miles (Stephenson and Calcarone 1999). Also, the RMDP/SCP project area supports habitat for mountain lions dispersing through the region. Mule deer are common on site and currently use much of the site. American black bear has been documented to use the High Country SMA and there may be some suitable denning habitat in the High Country SMA and Salt Creek area. This species also may use the site when moving between the Santa Susana Mountains and Santa Monica Mountains to the south and the Los Padres National Forest and Angeles National Forest in the Sierra Madre Mountains to the north. All three species are considered to be relatively common to common in suitable habitat in the SCRW, but primarily use the more remote areas of the watershed north and south of the RMDP/SCP project area.

These species use a variety of habitats, and probably are only limited in their habitat use by the amount of vegetation cover available. Of the habitats in the SCRW, they are only expected to be absent from large areas of annual grassland, agriculture, and disturbed lands that lack cover, although mule deer often forage in grassland at the edges of shrubland, riparian, and woodland habitats. For the purpose of this analysis, suitable habitat for these species is defined as coastal scrub, chaparral, riparian, and oak woodland.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 755,000 acres of suitable habitat for these species the SCRW. It is not expected that all 755,000 acres are used by all of these species. Based on the RMDP/SCP project area occurrences, the mule deer may be relatively common in these habitats, but the mountain lion and black bear are expected to be much less common.

Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 34,000 acres 755,000 acres of these habitats. This loss of habitat could be a potential significant impact on these species in the watershed. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact on coastal scrub, chaparral, riparian, and woodland habitat is 2,300 acres, which could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including nighttime illumination of areas adjacent to open space, which could disrupt foraging and movement behavior; increased vehicle collisions at new and expanded roadways; increased encounters with humans and pet, stray, and feral dogs; and the use of rodenticides to control small mammals (*e.g.*, ground squirrels and rabbits, which are prey for mountain lion), which may reduce prey populations and possibly cause secondary poisoning of predators. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation.

Several mitigation measures would be implemented to reduce cumulative impacts to habitat and long-term secondary effects associated with development. The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR (**Subsection 4.4.10, Project Mitigation Measures**) include habitat preservation, restoration, enhancement, and management of upland and riparian habitat areas in the River Corridor SMA, High Country SMA, and Salt Creek area that would form a large, contiguous open space system of about 6,300 acres that supports these species. It is expected that these species would continue to use these areas as resident and movement habitat after buildout of the RMDP/SCP project area. The set-aside of lands also would reduce long-term secondary effects, such as increased noise, lighting, and increased human activity because individuals would have access to substantial habitat in undisturbed open space that would support their life history needs, including foraging, reproduction, movement, and dispersal. Long-term secondary effects, such as increased human activity; pet, stray, and feral dogs; lighting; and rodenticides would also be mitigated through a variety of measures associated with management of open space.

As discussed in detail in **Subsection 4.5.5.2.4.2, Impacts to Wildlife Landscape Habitat Linkages**, the proposed RMDP/SCP project may affect regional habitat connectivity and movement by these species. The combined High Country SMA and Salt Creek area provide the most direct connections between the River corridor habitat and large upland habitat areas south of the River, and are those identified by Penrod *et al.* (2006, Recirculated Draft EIR**, Appendix 4.4**) as important components of regional habitat connectivity. The River Corridor SMA also is an important east-west habitat linkage and intersects the north-south linkage provided by the High Country SMA and Salt Creek area. These habitat linkages would remain intact and functional after implementation of the RMDP and SCP and buildout of the Specific Plan, VCC, and Entrada planning areas. The impact of the proposed RMDP/SCP project on regional habitat connectivity, therefore, was determined to be adverse but not significant. Other present and reasonably foreseeable projects considered in this analysis would not affect these regional habitat linkages.

In addition to these measures reducing impacts to these species at the project level, these species have broad geographic ranges, are known to occur in suitable habitat within the watershed, and much of the watershed consists of National Forest system lands and other designated public ownership lands that provide primary habitat for these species in the SCRW.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of these species; (2) a cumulatively considerable contribution to a potential significant cumulative impact due to loss of suitable habitat; (3) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects; or (4) a cumulatively considerable contribution to a potential significant impacts to regional wildlife habitat linkages.

(d) Listed Plant Species

San Fernando Valley Spineflower (CE). The San Fernando Valley spineflower occurs at two known locations: on Newhall Land property in Los Angeles County and on the Upper Las Virgenes Canyon Open Space Preserve (formerly Ahmanson Ranch) in Ventura County. The Upper Las Virgenes Canyon Open Space Preserve occurrence lies outside the SCRW boundary; however, it is included in this cumulative impacts analysis as it is the only other known occurrence of this species. The total cumulative area occupied by San Fernando Valley spineflower, including the RMDP/SCP project site and the Ventura County site, is 30.84 acres. Of that total, 20.24 acres are on Newhall Land property and 10.60 acres are at Upper Las Virgenes Canyon Open Space Preserve. The Preserve land is owned by the State of California and is managed by the Mountains Recreation and Conservation Authority, and is preserved in perpetuity.

Due to San Fernando Valley spineflower's very limited known distribution, occurring on only 30.84 acres of known occupied habitat, it is susceptible to almost any habitat loss. Thus, any significant adverse impact to San Fernando Valley spineflower could be a potential significant cumulative impact.

Under Alternative 2 of the RMDP/SCP, a total of 6.35 acres of San Fernando Valley spineflower occupied area would be lost. The remainder of known occupied habitat on the RMDP/SCP project site would be preserved and managed, as described in the Spineflower Conservation Plan (SCP). The preserved areas would be susceptible to secondary impacts, which would be minimized or avoided through implementation of the SCP. It should be noted that the Landmark Village project would not result in any direct loss of San Fernando Valley spineflower, and would not contribute to the cumulative loss of this species.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term

secondary effects, including hydrologic alterations and water quality impacts; accidental clearing, trampling, and grading; runoff, sedimentation, erosion and chemical and toxic compound pollution; exposure to fugitive dust; the introduction of non-native, invasive plant and animal species; increased human activity and trampling and soil compaction; and increased risk of fire. At the watershed level these secondary effects could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP project to this potential cumulative secondary impact could be cumulatively considerable, absent mitigation. However, the Landmark Village project does not does not include any populations of San Fernando Valley spineflower within the project site's disturbance boundaries. One population occurs at a location surrounded by the Adobe Canyon borrow site. (To avoid impacts to this population, grading in this location would be redesigned to be a minimum of 300-feet away from known spineflower plants).[28] Other spineflower populations occur to the west and the south of the borrow site's disturbance boundary, but a minimum of 300 feet also would be provided from known spineflower locations. Given that grading and/or clearing areas would be over 300 feet from known spineflower populations, and with incorporation of avoidance mitigation measures, the Landmark Village project would not considerably contribute to cumulative secondary impacts to this species.

See **Subsection 4.4.10** for mitigation measures required by the Newhall Ranch Specific Plan Program EIR and mitigation measures recommended by this EIR to mitigate impacts to the San Fernando Valley spineflower. The loss of 6.35 acres of San Fernando Valley spineflower occupied area within the RMDP/SCP project area was determined to be a significant unavoidable impact under Alternative 2, because this species is only known in two locations rangewide. It was determined that the preservation and management of 13.89 occupied acres and associated spineflower preserves (totaling 167.6 acres) would not mitigate project-related impacts to San Fernando Valley spineflower to less than significant.

Due to the species' rarity throughout its known range and the other conservation issues described above, even with the mitigation measures required by the Newhall Ranch Specific Plan EIR and mitigation measures recommended by this EIR, a significant impact to even a single occurrence would also result in a cumulatively considerable contribution to a potential significant cumulative impact. Therefore, the RMDP/SCP project-specific impacts of Alternative 2 to San Fernando Valley spineflower would be a significant and unavoidable cumulative impact.

Under RMDP/SCP Alternatives 3 through 7, on-site loss of San Fernando Valley spineflower would be decreased so that proposed preservation, habitat enhancement, and management under the SCP would mitigate this loss to below the level of significance. On-site preservation and management prescribed in the SCP in combination with the ongoing long-term preservation of the Laskey Mesa at the Upper Las

28 According to the Conservation Biology Institute, spineflower buffer areas need to be at least 80 to 100 feet to be moderately effective (CBI 2000).

Virgenes Canyon Open Space Preserve, would reduce overall cumulative impacts to San Fernando Valley spineflower. As a result, under RMDP/SCP Alternatives 3 through 7, the proposed RMDP/SCP, including the Landmark Village project, would not have a cumulatively considerable contribution to any potentially significant cumulative impacts to San Fernando Valley spineflower.

(e) California Native Plant Society (CNPS) and Locally Regulated Plant Species

Undescribed everlasting.[29] This undescribed species does not have a CNPS listing status, but is assumed to meet the criteria for designation to CNPS List 1B for purposes of this analysis. The undescribed everlasting was observed on sandy, alluvial benches along the Santa Clara River and within Hasley Canyon. This undescribed everlasting occurs from San Luis Obispo south to San Diego counties, west of the Peninsular and Transverse Ranges. Because this species is associated with sandy alluvial benches along river floodplains, it was not possible to model suitable habitat within the RMDP/SCP project area, nor within the SCRW, based on the California GAP vegetation database (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), which was compiled at a broad scale and necessarily lower precision. Therefore, cumulative impacts to this species are analyzed based on the loss of individuals of this species.

The proposed RMDP/SCP project would result in the loss of 357 individuals of the undescribed everlasting. This species' distribution is expected to be limited to the floodplain of the Santa Clara River and the lower portions of major tributaries. It is anticipated that other present and reasonably foreseeable proposed development within the SCRW would impact occurrences of this species, although it is likely that there would be some level of avoidance of these riparian areas. This could be a potential significant cumulative impact for this species within the watershed. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to the loss of individuals could be a potential significant cumulative impact, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and hydrologic alterations and water quality impacts. This could be a potential significant cumulative impact for this species within the watershed. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to these secondary impacts could be cumulatively considerable, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommend in this EIR includes avoidance and minimization measures, including salvage of seeds and/or transplantation (see

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29 Some experts identify this species as white-headed cudweed (*Gnaphalium leucocephalum*), which is a CNPS List 2.2 species (S3.2).

Subsection 4.4.10, Project Mitigation Measures). As required by BIO-75 and BIO-76, focused surveys to be conducted prior to the commencement of grading/construction activities within suitable habitat for the undescribed everlasting would ensure that individual plants are detected. Avoidance measures, and, if necessary, the salvage of seeds and/or transplantation of individuals identified within the disturbance area to an appropriate receptor site within the River Corridor SMA/SEA 23 where long-term preservation is provided, shall be implemented as outlined within the undescribed everlasting mitigation and monitoring plan. In addition, mitigation measures designed to provide for the long-term maintenance of the River Corridor SMA/SEA 23 in a natural state by restricting access and prohibiting grazing, agriculture, and recreation within the River Corridor SMA/SEA 23, as well as providing for the restoration and enhancement of habitat within the River Corridor SMA/SEA 23, would mitigate the loss of undescribed everlasting.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; or (2) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Undescribed sunflower. This undescribed species does not have a CNPS listing status, but is assumed to meet the criteria for designation to CNPS List 1B for purposes of this analysis. This species is only known to occur in the Middle Canyon drainage in the RMDP/SCP project area. Therefore, there would be no other known impacts to this species by other projects in Los Angeles and Ventura counties and, therefore, there would be no cumulative impacts.

Island mountain-mahogany. This CNPS List 4.3 species is known to occur on site within chaparral within the Specific Plan and Entrada planning areas of the RMDP/SCP project area. Island mountain-mahogany was observed nearly every year in the RMDP/SCP project area and is considered to be common in chaparral vegetation communities on site. This species has been documented in chaparral throughout Los Angeles and Ventura counties, including the Channel Islands (except San Clemente Island) (CNPS 2007; Hickman 1993). Island mountain-mahogany is fairly common in suitable habitat throughout the watershed.

As described in **Table 4.4-27**, Summary of Cumulative Impacts to CNPS and Locally-Regulated Plant Species in the Santa Clara River Watershed, based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 550,000 acres of chaparral in the SCRW, although island mountain mahogany are not expected to occur in all 550,000 acres. For example, within the RMDP/SCP project area, island mountain-mahogany was found primarily in chaparral at the base of north-facing slopes. Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 12,500 acres of 550,000 acres of chaparral. This

could be a potential significant cumulative impact for this species within the watershed. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 460 acres. This loss of habitat would not be a cumulatively considerable contribution to a potential significant cumulative impact because of this species' widespread distribution within its range.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. These secondary impacts would not be a significant cumulatively impact because of this species' widespread distribution within its range, and the configuration of large tracts of chaparral within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Late-flowered mariposa lily. Within the RMDP/SCP project area**,** this CNPS List 1B.2 species is only known to occur in the High Country SMA. Implementation of the RMDP and SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in any direct or indirect impacts to late-flowered mariposa lily. Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, could, however, result in potential long-term secondary effects, including the introduction of non-native, invasive plant species and increased human activity, trampling, and plant collecting. This could be a potential significant cumulative impact for this species within the watershed. RMDP/SCP project implementation could result in such secondary impacts by recreational visitors in the High Country SMA, but these secondary impacts would be minimal because even if flowers were picked or a plant trampled, the underground bulb would remain. The proposed RMDP/SCP project would not considerably contribute to a potential significant cumulative secondary impact in the watershed.

Mainland cherry. This species does not have a CNPS listing status but is designated as special-status by the County of Los Angeles. Mainland cherry (*Prunus ilicifolia* ssp. *ilicifolia,* a subspecies of holly-leaf cherry) was observed nearly every survey year (2002 through 2007) within chaparral and big sagebrush scrub within the Specific Plan, VCC, and Entrada planning areas within the RMDP/SCP project area. Mainland cherry is an occasional component of chaparral and big sagebrush scrub vegetation communities on site. This species ranges throughout the central and southern Coast Ranges and from Napa County southward to Baja California (Hickman 1993; McMurray 1990). Mainland cherry is an occasional component in suitable habitat throughout the watershed.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 556,000 acres of chaparral and big sagebrush scrub in the SCRW, although mainland cherry is not expected to occupy all 556,000 acres (see **Table 4.4-27**). For example, within the RMDP/SCP project area, mainland cherry was found primarily in chaparral and big sagebrush scrub in association with ephemeral and/or intermittent stream channels (river wash). Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 12,000 acres of 556,000 acres of chaparral and big sagebrush scrub. This could be a potential significant cumulative impact for this species within the watershed. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 460 acres. This contribution would not be cumulatively considerable because this species is relatively common and widespread throughout the SCRW.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. This would not be a significant cumulative impact for this species within the watershed because this species is relatively common and widespread throughout the SCRW. In addition, the configuration of large tracts of preserved chaparral and big sagebrush scrub within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Oak Trees. Oak trees are designated as special-status by the County of Los Angeles. Oak trees were observed every year within the Specific Plan, VCC, and Entrada planning areas within the RMDP/SCP project area. Oak trees are the dominant species in oak woodland and oak/grass vegetation communities on site, as well as occasional components of other vegetation communities on site. The oak species observed on site (coast live oak, Valley oak, scrub oak, Alvord oak, and interior live oak) have been documented throughout much of California and (for coast live oak) southward to Baja California (Hickman 1993; McMurray 1990).

The combined direct and indirect permanent loss of individual oak trees resulting from implementation of the RMDP and the SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would total 1,370 individuals (5.9 percent of the oak trees in the RMDP/SCP project area). It is anticipated that present and reasonably foreseeable projects in the SCRW would impact other occurrences of these species. Although oak woodlands were not mapped for any of the projects listed as past, present, or reasonably foreseeable in the California GAP database (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**) due to the coarse scale of mapping, the fact that oaks occur in the proposed RMDP/SCP project area (despite not occurring in the GAP data) suggests that oaks probably occur at least in small numbers on other project sites. This could be a potential significant cumulative impact for these species

within the watershed. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to the cumulative loss of individual oak trees could be cumulatively considerable, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; hydrologic alterations and water quality impacts; increased human activity that may result in littering, vandalism, and increased susceptibility to diseases, and trampling and soil compaction; and an increased risk of fire. The RMDP/SCP project's contribution to these impacts in the watershed would not be a significant cumulative impact because the configuration of large tracts of oak woodland vegetation communities within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR includes avoidance and minimization measures (see **Subsection 4.4.10, Project Mitigation Measures**). The applicant would implement several mitigation measures to avoid, minimize, and mitigate impacts to individual oak trees and their associated habitat. The proposed mitigation encompasses a three-part strategy that incorporates (1) planting replacement trees, per the requirements of CLAOTO and previously incorporated measure SP-4.6-48; (2) additional replacement ratios recommended in this EIR for impacts to oak trees and oak woodlands where they occur within stream channels falling under CDFG and Corps jurisdiction, per 1600 and 404 (BIO-2); and (3) additional measures recommended in this EIR for tree replacement or woodland restoration/enhancement to mitigate for oak trees and woodland occurring in uplands outside CDFG and Corps jurisdiction (BIO-22). General procedures to avoid and minimize impacts to oak trees during construction would be implemented and a qualified biologist would be present during construction in order to avoid inadvertent impacts to biological resources outside of the grading area, further reducing impacts to the species.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; or (2) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Oak-leaved nemophila. This CNPS List 4.3 species was known to occur from Tuolumne County south through Kern County (CNPS 2007). Occurrences on the RMDP/SCP project site are the southernmost recorded occurrences of the species. Oak-leaved nemophila was found in several locations within oak woodland within the Specific Plan area. Oak-leaved nemophila is assumed to occur as an occasional component of oak woodlands within the Specific Plan area. For the purpose of this analysis, oak-leaved

nemophila is considered to be an occasional component of oak woodlands throughout the watershed. It is anticipated that present and reasonably foreseeable projects in the SCRW would impact occasional occurrences of this species.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 5,170 acres of oak woodland vegetation communities in the SCRW (see **Table 4.4-27**). Based on the project-level mapping, 95 acres (out of 1,168 acres) of oak woodland vegetation communities on site would be impacted by the proposed RMDP/SCP project. Given the presence of oak woodland vegetation communities within the proposed RMDP/SCP project area, National Forest system lands and other designated open space within the watershed (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), the impact to occasional individuals would not be a significant cumulative impact.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. These secondary effects would not be a significant cumulative impact because the configuration of large tracts of oak woodland vegetation communities conserved within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Ojai navarretia. Within the RMDP/SCP project area, this CNPS List 1B.1 species is only known to occur in the Salt Creek area. Implementation of the RMDP and SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in any direct or indirect impacts to Ojai navarretia, Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, could, however, result in potential long-term secondary effects, including the introduction of non-native, invasive plant species and increased human activity, and trampling. This could be a potential significant cumulative impact for this species within the watershed. RMDP/SCP project implementation could result in such secondary impacts by recreational visitors in the Salt Creek area, but these secondary impacts would be minimal. The proposed RMDP/SCP project would not considerably contribute to a potential significant cumulative secondary impact in the watershed.

Parish's sagebrush. This species does not have a CNPS listing status but is designated as special-status by the County of Los Angeles. Parish's sagebrush occurs within big sagebrush scrub within the Specific Plan and Entrada planning areas of the RMDP/SCP project area. Parish's sagebrush occurs along coastal ranges in Baja California and southern California, extending inland to regions south of the Great Basin (Shultz 2006A, 2006B). It is considered regionally rare by local botanists (Meyer 2007). When observed in the RMDP/SCP project area, Parish's sagebrush was found primarily intermixed with common big

sagebrush within big sagebrush scrub. For the purpose of this analysis, Parish's sagebrush is considered to be a minor component of big sagebrush scrub throughout the watershed.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 5,000 acres of big sagebrush scrub in the SCRW (see **Table 4.4-27**). Based on the GAP data, present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 19 acres of 5,000 acres of big sagebrush scrub (this is likely a significant underestimate, however, due to the coarse mapping scale of the GAP data). Although the California GAP database does not include big sagebrush scrub within the proposed RMDP/SCP project area, the project-level mapping indicates that 91.3 acres of big sagebrush scrub are present on site. The proposed RMDP/SCP project would impact 70 acres of the big sagebrush scrub on site. It is anticipated that occasional individuals of this species would be impacted by other present and reasonably foreseeable projects. Given the presence of big sagebrush scrub within the National Forest system lands and other designated open space within the watershed, the impact to occasional individuals of Parish's sagebrush would not be a significant cumulative impact.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. Cumulative impacts due to secondary effects would not be significant because of the limited amount of big sagebrush scrub within the SCRW.

Peirson's morning-glory. This CNPS List 4.2 species is known to occur on site within chaparral, coastal scrub, and grassland vegetation communities within the Specific Plan, VCC, and Entrada planning areas of the RMDP/SCP project area. Peirson's morning-glory was observed nearly every year in the RMDP/SCP project area and is common in chaparral, coastal scrub, and grassland vegetation communities on site. This species has been documented in Los Angeles County in the northern San Gabriel Mountains and adjacent Mojave Desert (Antelope Valley) (CNPS 2007; Hickman 1993). In the Liebre Mountains northeast of the RMDP/SCP project Area and largely within the SCRW, it is "widespread and locally common" in grasslands, open shrublands, and woodlands (Boyd 1999).

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 747,000 acres of chaparral, coastal scrub, and grassland vegetation communities in the SCRW (see **Table 4.4-27**). Present and reasonably foreseeable projects in the SCRW, including the proposed RMDP/SCP project, would cause the loss of approximately 34,000 acres of 747,000 acres of chaparral, coastal scrub, and grassland. This could be a potential significant cumulative impact. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 3,050 acres. This contribution would not be a significant cumulative

impact because of this species' widespread distribution within its range.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. Cumulative impacts due to secondary impacts would not be significant because of this species' widespread distribution within its range. In addition, the configuration of large tracts of chaparral, coastal scrub, and grassland vegetation communities within the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Plummer's mariposa lily. Within the RMDP/SCP project area, this CNPS List 1B.2 species is only known to occur in the High Country SMA. Therefore, implementation of the RMDP and SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in any direct or indirect impacts to Plummer's mariposa lily and would not contribute to any cumulative impacts in the watershed. Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, could, however, result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and plant collecting; and wildfire. This could be a potential significant cumulative impact for this species within the watershed. At the project level, because this species only occurs in the High Country SMA and away from trails, human-related effects such trampling and collecting are unlikely to occur. RMDP/SCP project implementation could cause secondary impacts to the species from a more frequent fire regime, but these impacts likely would be limited because this species also has a positive response to wildfire (*e.g.*, bulbs tend to flower in higher numbers following wildfire, which introduces large quantities of mineral nutrients (as ash) into the soil). The proposed RMDP/SCP project, therefore, would not considerably contribute to potential significant cumulative secondary impacts in the watershed.

Table 4.4-27
Summary of Cumulative Impacts to CNPS and Locally Regulated Plant Species in the Santa Clara River Watershed[1]

Species	Habitat Relationships[2]	Total Acres of Habitat in Watershed	Permanent Direct and Indirect Impact Acres of Proposed RMDP/SCP project	Total Impact Acres in Watershed From Present and Reasonably Foreseeable Projects (Not Including Proposed RMDP/SCP project)	Estimated Cumulative Impact Acres in Watershed after Accounting for Proposed RMDP/SCP project Plus Present and Reasonably Foreseeable Projects
island mountain-mahogany	Chaparral	550,300	460 (<0.1%)	12,000 (2.1%)	12,460 (2.3%)
mainland cherry	Big sagebrush scrub Chaparral	556,000	460 (<0.1%)	12,000 (2.1%)	12,460 (2.3%)
oaks	Oak woodland	5,170	95 (1.8%)	0 (0.0%)	95 (1.8%)
oak-leaved nemophila	Oak woodland	5,170	95 (1.8%)	0 (0.0%)	95 (1.8%)
Parish's sagebrush	Big sagebrush scrub	5,000	0 (0.0%)	19 (0.4%)	19 (0.4%)
Peirson's morning-glory	Coastal scrub Chaparral Non-native grassland	747,000	3,050 (0.4%)	31,000 (4.1%)	34,050 (4.5%)
southern California black walnut	California walnut woodland	3,627	0 (0.0%)	0 (0.0%)	0 (0.0%)
southwestern spiny rush	Permanently flooded lacustrine habitat	5,000	0 (0.0%)	0 (0.0%)	0 (0.0%)

Notes:
[1] *Acreages were not quantified for the undescribed sunflower because impacts are site-specific. Acreages were not quantified for undescribed everlasting, late-flowered mariposa lily, Ojai navarretia, Plummer's mariposa lily, and slender mariposa lily because the project-level analysis was based on impacts to individuals rather than habitat.*
[2] *Acreages based on California GAP Vegetation Communities (UCSB, 1999, Recirculated Draft EIR, **Appendix 4.4**) and project-level mapping within RMDP/SCP project boundaries.*

Slender mariposa lily. This CNPS List 1B.2 species is known to occur on site within grassland and coastal scrub within the Specific Plan and Entrada planning areas of the RMDP and SCP RMDP/SCP project area. Slender mariposa lily was observed nearly every year in the RMDP/SCP project area and is locally abundant in some parts of the RMDP/SCP project area. This species has been documented in the southern San Gabriel Mountains and Liebre Mountains of eastern Los Angeles County and the Santa Susana Mountains in western Los Angeles and Ventura counties (CNPS 2007; Boyd 1999).

The combined direct and indirect permanent loss of slender mariposa lily cumulative occupied area and individuals resulting from implementation of the RMDP and the SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would total 72 acres (35.0 percent of cumulative mapped occupied habitat) and 30,645 individuals (46.4 percent of plants censused on site). It is anticipated that present and reasonably foreseeable projects in the SCRW would impact other occurrences of this species, though these impacts have not been documented or quantified due to a lack of specific information. This could be a potential significant cumulative impact to this species within the watershed. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to this potential significant cumulative impact is 72 acres and 30,645 individuals, which could be a significant cumulative impact, absent mitigation.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased risk of fire; and increased human activity, collecting, trampling, and soil compaction. These secondary impacts could be a significant cumulative impact, absent mitigation.

The mitigation required by the Newhall Ranch Specific Plan Program EIR and recommended in this EIR includes avoidance and minimization measures (see **Subsection 4.4.10, Project Mitigation Measures**). The applicant would implement several mitigation measures to avoid, minimize, and mitigate impacts to individuals. A slender mariposa lily habitat replacement/enhancement program is outlined within the Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 2007), which describes how the applicant would successfully restore/enhance slender mariposa lily habitat and re-establish slender mariposa lily locations at appropriate receptor sites within the High Country SMA, Salt Creek area, and San Martinez Grande area where opportunities for long-term preservation are provided. While implementation of the proposed RMDP/SCP project would result in impacts to a maximum of 72 acres of cumulative occupied area are within the development footprint, the mitigation and monitoring program mitigates impacts to slender mariposa lily cumulative occupied area at a ratio of 1:1 through successfully restoring/enhancing slender mariposa lily habitat and re-establishing slender mariposa lily locations in the High Country SMA, Salt Creek area, and other sites as appropriate. A minimum of 133 acres of

slender mariposa lily cumulative occupied area would be conserved in the RMDP/SCP project boundaries. These conserved acres include 73 acres of occupied habitat in the Salt Creek area, 30 acres in the High Country SMA and at least 28 acres in the San Martinez Grade area.

Long-term secondary impacts to slender mariposa lily, such as the introduction of non-native, invasive plant species; hydrologic alterations and water quality impacts; increased human activity, trampling, and soil compaction; and increased risk of fire would be minimized by restricting access to, grazing within, and recreational usage of the High Country SMA; providing for transition areas along the High Country SMA; providing drainage guidelines; requiring conformance with NPDES and RWQCB permit provisions; requiring the implementation of a wildfire fuel modification plan; placing restrictions on domestic animals in proximity to open space areas; by providing trail signage and homeowner education; and placing restrictions on plant palettes proposed for use on landscaped slopes.

For the reasons set forth above, the proposed RMDP/SCP, including the Landmark Village project, would not result in: (1) a cumulatively considerable contribution to a potential significant cumulative impact on individuals of this species; or (2) a cumulatively considerable contribution to a potential significant cumulative impact due to secondary effects.

Southern California black walnut. This CNPS List 4.2 species is known to occur on site as the dominant species of California walnut woodland, which is only known to occur in the High Country SMA and Salt Creek area within the RMDP/SCP project area. Southern California black walnut has also been observed as an uncommon component within other vegetation communities within the RMDP/SCP project area, including oak woodlands, coastal scrub, and chaparral. Implementation of the RMDP/SCP and buildout of the Specific Plan, VCC, and Entrada planning areas would not result in direct or indirect impacts to the 27 acres of California walnut woodland on site. Individual southern California black walnut trees are uncommon in other vegetation communities, but implementation of the RMDP/SCP and buildout of the Specific Plan, VCC, and Entrada planning areas is expected to result in the removal of occasional individual southern California black walnut trees that exist in vegetation communities other than California walnut woodland.

Based on the California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**), there are approximately 3,600 acres of California walnut woodland in the SCRW. Although the California GAP database does not include California walnut woodland within the proposed RMDP/SCP project site, the project-level mapping indicates 27 acres of California walnut woodland are present on site. The proposed RMDP/SCP project would not impact California walnut woodland on site. It is anticipated that present and reasonably foreseeable projects, including the proposed RMDP/SCP project, in the SCRW would result in the removal of occasional individual southern California black walnut trees that exist in

vegetation communities other than California walnut woodland. For example, Boyd observed this species as occasionally occurring in scrub and woodland within lower Bouquet Canyon, and scarcely occurring at other sites in lower elevations to the west and south (Boyd 1999). Given the presence of California walnut woodland within the National Forest system lands and other designated open space within the watershed, the impact to occasional individuals of southern California black walnut would not be a significant cumulative impact.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; increased human activity, trampling, and soil compaction; and increased risk of fire. Cumulative impacts due to secondary effects would not be significant because of this species' widespread distribution within its range. In addition, the configuration of California walnut woodland in the SCRW results in a relatively low ratio of edge to core habitat and, therefore, reduces the chance of edge-related secondary impacts.

Southwestern spiny rush. This CNPS List 4.2 species was observed on site along secondary channels and low terraces along the Santa Clara River within the Specific Plan area of the RMDP/SCP project area. Southwestern spiny rush occurs in San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties, and southward into Baja California; the distribution of this species possibly extends east into Imperial County and Arizona as well (CNPS 2007). This species is considered locally and regionally rare by local botanists and has been documented from 10 vouchered collections from Los Angeles County, half of which are on Santa Catalina Island (Magney and Hoskinson 2007). This species was observed in 2006 in Violin Canyon adjacent to the Angeles National Forest and Interstate 5 (I-5), south of Templin Highway and Paradise Ranch, eight miles north of Castaic, in Los Angeles County. Southwestern spiny rush was observed in 2007 near the western bank of Castaic Creek above the Castaic power plant. This species was observed in 2005 and 2006 in Piru Creek (below Frenchman's flat) and Oso Creek (Huntley 2009). Southwestern spiny rush was observed along Castaic Creek upstream of the confluence of Castaic Creek and Fish Creek, and this species is locally common in Grasshopper Canyon (Boyd 1999). Based on these observations, southwestern spiny rush is considered to be an occasional component in suitable habitat throughout the watershed.

This species is associated with perennially wet areas (perennial streams, seeps, marshes, *etc.*) within riparian habitat. The California GAP data (UCSB, 1999, Recirculated Draft EIR**, Appendix 4.4**) includes approximately 25,000 acres of mapped riparian habitat but does not identify the very small subset of perennially wet habitat where southwestern spiny rush may occur. It is anticipated that present and reasonably foreseeable projects in the SCRW would result in the removal of occasional individual southwestern spiny rush that exist in perennially wet habitat within the watershed. However, this plant

is known to occur within National Forest system lands that would not be subject to the same level of impact associated with present and reasonably foreseeable projects on private lands in the SCRW. Impacts to this species would not be cumulatively significant because of this species' widespread distribution within the watershed and its range.

Without accounting for past, present, or reasonably foreseeable mitigation, present and reasonably foreseeable projects, including the proposed RMDP/SCP project, also could result in potential long-term secondary effects, including the introduction of non-native, invasive plant species; hydrologic alterations and water quality impacts; and increased human activity, trampling, and soil compaction. Impacts to this species would not be cumulatively significant because of this species' widespread distribution within its watershed and its range.

e. Summary of Cumulative Impacts to Biological Resources

Based on the preceding discussion, the cumulative impact analysis for biological resources resulted in four different cumulative impact determinations:

1. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to a potential cumulative impact in the watershed resulting from present and reasonably foreseeable projects would be cumulatively considerable and unavoidable, even after considering mitigation required by the Newhall Ranch Specific Plan Program EIR and the mitigation measures recommended in this EIR. No feasible additional mitigation measures can be identified that would reduce the considerable contribution to a potential significant impact to a level less than cumulatively considerable under this alternative. Reasons for these significant unavoidable impacts include:

   (a) extensive loss and fragmentation of the resource within the Santa Clara River watershed; and

   (b) substantial on site habitat loss and fragmentation of a resource with a very limited distribution on site and/or geographic range.

2. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to a potential cumulative impact in the watershed resulting from present and reasonably foreseeable projects, could be cumulatively considerable, absent mitigation. Implementation of the mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and this EIR would reduce the contribution of the proposed RMDP/SCP, including the Landmark Village project, to cumulative impacts to a level less than cumulatively considerable.

3. The contribution of the proposed RMDP/SCP, including the Landmark Village project, to a potential cumulative impact in the watershed resulting from present and foreseeable projects, would not be cumulatively considerable. This determination was made where the resource affected by the proposed RMDP/SCP project comprises a very small proportion of the resource impacts in the watershed.

4. Past, present, and reasonably foreseeable projects, including the proposed RMDP/SCP project and Landmark Village, do not result in potential significant watershed-level impacts. This determination was made when the resource is still common to abundance it its geographic range and/or substantial habitat for the species would remain in the watershed.

Table 4.4-28 provides a summary of the Landmark Village project's contribution to cumulative impacts determinations for biological resources.

Table 4.4-28
Summary of Cumulative Impact Determinations for Biological Resources

Cumulative Impact Determination	Biological Resource	Project's Contribution Cumulatively Considerable After Mitigation
Contribution of Landmark Village to potential cumulative impact would be cumulatively considerable; significant and unavoidable	**Vegetation Communities** coastal scrub communities – extensive loss and fragmentation in the Santa Clara River watershed	Yes

There was one significant, cumulatively considerable and unavoidable impact for the Landmark Village project: impacts to coastal scrub communities.

Impacts would be cumulatively considerable, absent mitigation, for a majority of other biological resources, including vegetation communities other than coastal scrub; common wildlife as a whole; most of the federally and state-listed threatened and endangered and all California Fully Protected species; wildlife habitat linkages, corridors, and crossings; most California Species of Special Concern; many California Special Animals, Watch List species, Specially Protected Mammals, and CDFG Trust Resources; and three special-status plants. The mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and this EIR (**Subsection 4.4.10, Project Mitigation Measures**) would reduce impacts to these resources to a level less than cumulatively considerable. To offset loss vegetation communities and habitat for species, these mitigation measures generally include the dedication and maintenance of existing natural lands in the Open Area, River Corridor SMA/SEA 23, High Country SMA/SEA 20, and Salt Creek area, totaling approximately 9,753 acres. For riparian resources, these measures include replacing the functions and services of riparian communities that may be lost through construction. For both wildlife and plant species, mitigation includes measures to control for long-term secondary effects, including controls on public access to dedicated open space areas; controls on pet, stray, and feral cats and dogs; termination of grazing activities (except for the purpose of resource management); controls on invasive plant and animal species (including Argentine ants, brown-headed

cowbirds, bullfrogs, African clawed frogs, and crayfish); controls on pesticides (including rodenticides); controls on hydrological alterations and water quality; and controls on nighttime lighting; fencing and signage; and homeowner education about sensitive resources.

It was determined that the contribution of the proposed RMDP/SCP, including the Landmark Village project, to potential significant cumulative impacts at the watershed level would not be cumulatively considerable for most special-status biological resources, including southern steelhead and several special-status plants. In addition, it was determined that significant cumulative impacts to a majority of wildlife and plant species at the watershed level would not occur. Although the contribution of the proposed RMDP/SCP, including the Landmark Village project, would not be cumulatively considerable in these cases, the mitigation measures described above would reduce on site impacts to these resources.

In summary, although the proposed RMDP/SCP, including the Landmark Village project, would include significant impacts to biological resources absent mitigation, the mitigation measures required by both the Newhall Ranch Specific Plan Program EIR and recommended by this EIR would avoid, substantially lessen, or mitigate these impacts to below a level of significance. However, the proposed Landmark Village project, in combination with other past, present and reasonably foreseeable projects within the SCRW, would result in significant cumulative impacts to one biological resource/coastal scrub. Despite mitigation, the proposed Landmark Village project would result in a cumulatively considerable contribution to significant impacts on the coastal scrub community that cannot be avoided, substantially lessen, or mitigated to below a level of significance.

12. SIGNIFICANT UNAVOIDABLE IMPACTS

a. Project Impacts

The proposed project would not result in significant unavoidable impacts.

b. Cumulative Impacts

The proposed Landmark Village project would contribute toward the cumulative impacts to biological resources. Specifically, in the absence of mitigation, the project's contribution toward the cumulative impacts to coastal scrub would be significant.

Even with implementation of the following mitigation measures, the proposed project's contribution to cumulative impacts to coastal scrub would remain significant:

- Mitigation Measures **SP 4.6-37** through **SP 4.6-42** (which would protect 1,311 acres of coastal scrub in the High Country SMA/SEA 20);

- Mitigation Measure **LV 4.4-2** (preservation of 156.5 acres of coastal scrub off site within the High Country SMA/SEA 20, the Salt Creek area, or the River Corridor SMA/SEA 23 within the Specific Plan area to offset impacts associated with Landmark Village); and
- Protection of the Salt Creek Area (which contains 631 acres of this habitat type).

In the case of coastal scrub, no feasible additional mitigation measures applicable to Landmark Village could be identified that would reduce the significant impact to a less than cumulatively considerable level. Reasons for these unavoidable impacts include:

(a) extensive loss and fragmentation of the resource rangewide; and

(b) substantial on-site habitat loss and fragmentation of a resource with a very limited distribution on site and/or geographic range.